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The Journal

of the

South Carolina Medical Association

VOL. XXVII.

GREENVILLE, S. C., JANUARY, 1931

NO. 1

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EDITORIAL

COMMENTS ON THE MARLBORO CO. SOCIETY ANNUAL MEETING

For sustained effort we congratulate the Marlboro County Medical Society on the high type of its annual New Year programs and the large attendance from South Carolina and the surrounding States. The idea is now some ten years old and therefore ample opportunity has been given in which to evaluate the plan. For a small society of about fifteen members to bring together one hundred or more doctors every year and keep them keenly interested from beginning to the end of the program is an achievement. We suggest that other societies of similar proportions write to Secretary D. D. Strauss at Bennettsville and ask him how they succeed so well. The plan may be worthy of trial in other sections of the State. There is some danger in putting on a big program once a year to the effect that it may militate against the regular monthly or quarterly meetings of the organization. We took the trouble to inquire into that feature of it during the recent meeting and

were informed that such was not the case there. They have monthly meetings with keen interest in evidence. In some localities the matter of expense has to be considered when it comes to entertaining one hundred or more doctors. This falls heavily upon a few men. Marlboro County, however, is one of the most famous farming sections in the United States. In ordinary times the profession there shares in the prosperity of that highly favored section. They receive freely and they give freely. The recent meeting had on its program men of national reputation, professors in medical schools, high officers in organized medicine and those who discussed the papers were no less able in their respective fields. We commend the idea to other county societies as worthy of emulation.

THE SOUTH CAROLINA UROLOGICAL SOCIETY TAKES OVER DEPARTMENT IN THE JOURNAL

In this issue we are expanding the scope of the Department of Urology and our readers

should find this new departure increasingly interesting from every standpoint. We wish to call attention to the admirable address of President M. H. Wyman. Attention is called to the matter of proper presentation of medical papers. There may have been a time when little care was observed in preparing a paper for publication in the medical press owing largely to the lack of training along this line on the part of the medical profession. This no longer obtains however in the best scientific circles. Owing largely to the leadership of the Journal of the American Medical Association there has developed a definite standardized procedure in the preparation of medical papers to be read before medical societies and later published in the medical press. Dr. Wyman calls attention to one authoritative source at least to which any reader may refer. One of the first books ever published on the subject of how to write medical papers was that of the great English physician and writer, Dr. Clifford Allbut. Another small but valuable book on the same general subject is one published by Mrs. Maude Melish, Editor-in-Chief of the Mayo Clinic publications. We wish to encourage our younger physicians to begin writing medical papers early in their career and keep it up. Such a habit, if persisted in, will lead to a much wider knowledge on the part of the physician himself and now and then to a contribution of more than ordinary import. We would suggest that such writers refer frequently to the authoritative books mentioned and to others easily available.

THE LEGISLATURE

On looking over the names of the members of the House and the Senate now in session we are impressed with the fact that there are fewer doctors representing their respective counties than is usually the case. That does not mean that the medical profession will have no able defenders but the more good doctors we sent to the Legislature the more probable it is that the interests of the profession will receive prompt attention. At the present time about the only legislation affecting the medical profession to be presented

is that of some phase of labor insurance which was prominently before the last Legislature but failed to be enacted into law. In the past the Legislature has been generous to the State Board of Health and generous to the Medical College when the amounts appropriated are compared to the appropriations of former years. It is important that the medical profession keep posted on the needs of the medical school and give their whole hearted support to as liberal a viewpoint on the part of the state government as possible. We believe that the incoming governor will look with favor upon most forms of beneficent medical legislation. We say this because of his utterances before he members of the medical profession in their organized capacity. The main thing now is for every doctor in the state to exert himself when called upon by our legislative committee to aid them.

SEND IN TITLES NOW FOR THE GREENVILLE MEETING

The Committee on Scientific Work is ready to receive titles of volunteer papers to be read at the Greenville meeting, May 5, 6, 7. The titles may be sent to Dr. Hugh Smith, Greenville, S. C., Chairman of the Committee or to the Secretary of the Association. The program will be limited to twenty-five papers. About half this number has already been provided for in the several symposiums but there will be room for some of those who desire to appear on the program. The South Carolina Medical Association has always encouraged the volunteer presentation of papers. The Scientific Committee is in hearty accord with this idea.

THE WOMAN'S AUXILIARY

Elsewhere we are publishing some interesting contributions by the Woman's Auxiliary. The South Carolina branch of this organization is now favorably known for its splendid work throughout the United States. The Greenville meeting promises to be of large proportions. The facilities for taking care of the doctors' wives and daughters have been thoroughly canvassed by the officers of the

PRESIDENT'S PAGE

Kenneth M. Lynch, President, South Carolina Medical Association

THE AIMS AND OBLIGATIONS OF ORGANIZED MEDICINE. IV. PUBLIC MEDICINE VERSUS PRIVATE PRACTICE

The organized medical profession is not a public agency, not an executive authority. Its relations with the public are purely advisory. Its position should be one of giving its best advice when sought, of offering it, as advice, when it should be sought but is not, and of maintaining its position as advisor above suspicion.

The field of public health—of public medicine—is and should remain properly that of preventive medicine for the collective good of the people concerned. Private medicine is primarily curative and preventive as concerns the sickness or health of individuals. These two principles, when not carefully guarded, sometimes appear to come in conflict. They should not. Public health measures should not reach the point of entering the field of the practice of medicine. Private medicine should not meddle or interfere with the proper administration of public health measures, else it will lose its position as advisor on health matters. Further, private medicine must find the way to care for its obligation to all classes of people on an equitable basis or it will give the opportunity or make the necessity of the entering wedge of some other agency, public or private, into the practice of medicine.

To assume that the members of the medical profession, by virtue of having been taxed equally with other citizens, are no more obligated to care for charity medicine than are their fellow citizens is not only subject to question, it is suicidal. The medical profession has always assumed the burden of the medical care of the pauper sick. It is at least an assumed obligation—to me it is more than that, it is a natural obligation—and the present is not the time to discover that this is economically wrong, or to discard that responsibility. To do so is to invite public control of the practice of medicine among part of the population, from which it is only a step to the socialization of medical practice in general—it is to recognize the principle of state medicine instead of serving as an argument against it.

South Carolina is fortunate in having a Public Health Department organized on a model basis, the South Carolina Medical Association, through its selection of the members of the executive board, acting as its supervisor. The organized profession should guard this function very jealously and very carefully. It should be very certain that any hindrance of the activities of the Department are justified by actual violation of the well defined purposes and duties of that Department. Interference of any kind with the activities of the Department based upon misunderstanding, misinformation or immature judgment, might be the means at any time of severing the lines which the Association now has on the control of public health administration. Politicians are always watchful for an opportunity to increase their patronage.

The Profession should, also, pay serious attention to the proper care of charity medicine in order that health authorities may not be forced by outside influences to supply medical services beyond their purpose. If the Profession does not make such provision it certainly is not in position to criticize the public health department for being compelled to do so. Socialization of medicine in some form and to some degree seems inevitable to many physicians. Whether it is guided to the advantage of the Profession or misguided to our disadvantage depends to some extent on harmony and cooperation in the contacts between public and private medicine. If it must come let the Profession be in position to guide it for the best interests of medical progress, else it will surely miscarry, and incalculable harm result.

State Medical Association and it has been found that everything desired in the way of accommodations will be available. The Auxiliary to the Greenville County Medical Society is one of the most active organizations

in the country. They have done a tremendous amount of good work in their locality. It will give them keen pleasure to entertain the State Auxiliary this year.

ORIGINAL ARTICLES

*VITAMIN B FEEDING OF INFANTS

By J. I. Waring, M. D., Charleston, S. C.

With our increasing knowledge of the importance of vitamins, we are particularly concerned with securing for the growing infant an adequate supply of these essential substances. While the milk which is the basis of the diet in the earlier months of life contains a fair amount of some of the vitamins, we are not satisfied with relying on this source, but make sure of an ample quantity of Vitamins A, C, and D by supplying fruit juice, codliver oil, or viosterol, and sunlight. Only Vitamin B is neglected, and it is the opinion of many observers that a deficiency of this vitamin is responsible for a rather definite and fairly common train of symptoms which appear during infancy or early childhood.

The results of a gross deficiency of this vitamin are familiar to us in the form of pellagra and beriberi. The former we have with us in overabundance, while the latter probably occurs in our state (1) more often than is generally realized. The relatively recent discovery that Vitamin B consists of two factors, one the pellagra-preventive and the other the beriberi-preventive or anti-neuritic vitamin, accounts for the distinctly different pictures in these diseases. However, it is not with these severe manifestations that we are concerned for the moment, but with the milder but nevertheless troublesome and dangerous disturbances which follow a relative deficiency of the protective substances.

Vitamin B is present to some degree in milk and orange juice, and is plentiful in those foods which are not usually given to young

infants—namely, glandular and muscular meats, raw fruits, vegetables and unrefined cereals. A deficiency is likely to be evident in the period from the fifth to the ninth month, before the infant partakes of a varied diet, and may be manifested by a number of symptoms. These symptoms include more or less a vague gastro-intestinal disturbances, lack of color and lack of muscle tone, or perhaps some muscle tenderness and spasticity, colic, feeble cry, and especially failure to gain. The history of infants with such symptoms is apt to show that the diet is adequate in respect to calories, fluid, protein and salts, Vitamins A, C, and D, lacking only in Vitamin B. When the symptoms disappear, indefinite as they are, and marked general improvement follows the administration of the missing vitamin, it seems reasonable to assume that the deficiency is responsible for the condition of the child.

While the literature contains many reports of the use of sources of Vitamin B in animal experimentation, relatively little mention of clinical trial has appeared. Some years ago, Eddy and Roper (2) found that the vitamin obtained from pancreatic tissue stimulated growth in marasmic children, and Daniels and Byfield (3) used extract of wheat embryo and vegetable extract very successfully. Ladd, (4) on the other hand, found no virtue in feeding yeast to infants, and Daniels (5) felt that ordinary yeast was not a suitable source of Vitamin B. More recent experiments with prepared brewers yeast, or sugars derived from the wheat germ, or extract of wheat germ and yeast have resulted in very successful stimulation of growth and disappearance of the symptoms which are attributed to a deficiency of the vitamin. Hoobler (6) called

*Read before the South Carolina Medical Association, Florence, S. C., May 7, 1930.

attention to the symptomatology of Vitamin B deficiency, and Dennett (7) fed 150 infants on wheat germ sugar with uniform success in the production of growth and well being. More recently, Blossom, (8) using brewers yeast as a routine found that the growth of infants under observation compared most favorably with the growth of infants who received no yeast. West (9) has been able to stimulate growth in the nursing infant by assuring the mother of a sufficient supply of Vitamin B.

Recently I have had the opportunity of observing some very good results from the use of brewers yeast and wheat germ sugar in cases where the diet was apparently sufficient in respect to other requirements than Vitamin B, but the child failed to gain or showed some

of the symptoms mentioned above. The children were all kept on the same diets, were free of obvious infection which might have affected the weight curve, and actually took the yeast or sugar in the prescribed quantity. In a very few cases, according to the parents, the children refused the substance or had loose stools, or vomited, and consequently its use was discontinued, but in most instances no difficulty was encountered in administration. Among 21 children who had no such difficulties, definite improvement in weight, color, firmness, and general well-being, was apparent in 19 cases. Due allowance was made for normal fluctuations, but generally the improvement became evident so soon after the addition of the vitamin to a diet otherwise unchanged that the effect seem-

CASE	AGE	COLOR	CHIEF SYMPTOMS	RESPONSE	RESULTS	SUBSTANCE USED	GAIN BEFORE USE VIT. B. Period	GAIN AFTER USE VIT. B. Period
							Gain or Loss	Gain
1	21 mo.	col.	No gain, flabby	Rapid	Firmer	Yeast	5 mo. 5 oz.	5 mo. 3 lb.
2	42 mo.	wh.	Anorexia, no gain	Rapid	Firmer, better col.	Yeast	6 wk. 6 oz.	6 wk. 40 oz.
3	28 mo.	wh.	Anorexia, no gain	Rapid	Better color, gain.	Yeast	18 wk. 2 lb.	2 wk. 1 lb.
4	16 mo.	col.	Marasmic-œdema absent patellor reflexes	Rapid	Gain, Disappearance of œdema, reappearance of reflexes	Yeast	8 da. -3 oz.	18 da. 35 oz.
5a*	7 mo.	wh.	Anorexia, loss weight	Rapid	Gain, firmer, better color.	Wheat Sugar	3 wk. -1 oz.	5 wk. 12 oz.
5b*	13 mo.	wh.	Anorexia, loss weight	Rapid	Gain, firmer, better color.	Yeast	7 wk. -2 oz.	7 wk. 34 oz.
6	10 mo.	col.	No gain	None	No gain until weaned	Yeast	2 wk. 1 oz.	2 wk. 2 oz.
7	18 mo.	col.	Loss of weight	Rapid	Gain—firmer.	Wheat Sugar	2 wk. -9 oz.	2 wk. 15 oz.
8	15 mo.	col.	Loss of weight	Rapid	Gain—firmer.	Wheat	3 wk. -4 oz.	3 wk. 10 oz.
9	54 mo.	wh.	Loss of weight, pallor	Fair	Gain—firmer.	Sugar		
10	12 mo.	wh.	Anorexia	Rapid	Gain, no change in color.	Yeast	2½ mo. -5 oz.	2½ mo. 17 oz.
11	11½ mo.	col.	Slow gain	Fair	Gain.	Wheat	3 wk. 0	5 wk. 19 oz.
12	10 mo.	wh.	Slow gain, anorexia	Fair	Gain—firmer.	Sugar		
13	15 mo.	col.	Slow gain, anorexia	Good	Gain, good appetite	Yeast	8 mo. 6 lb.	1 mo. 1 lb.
14	9½ mo.	wh.	Slow gain, anorexia	Fair	Gain, good appetite	Yeast	6 wk. 18 oz.	6 wk. 30 oz.
15	47 mo.	wh.	Slow gain, anorexia	Fair	Gain.	Wheat	3 wk. -1 oz.	3 wk. 9 oz.
16	11½ mo.	wh.	Loss weight, pallor cough	Fair	Gain, improved color	Sugar		
17	72 mo.	wh.	Anorexia	Fair	Gain	Yeast	5 mo. -35 oz.	1 mo. 22 oz.
18	72 mo.	wh.	Anorexia	Fair	Gain	Wheat	2 wk. -9 oz.	3 wk. 13 oz.
19	16 mo.	col.	No gain	Fair	Gain	Yeast	1 mo. 5 oz.	1 mo. 10 oz.
20	12 mo.	col.	Anorexia, eyes puffy Loose stools	Good	Gain, eyes cleared stools normal	Yeast	1 mo. 5 oz.	1 mo. 15 oz.
21	5½ mo.	col.	Poor nutrition	None	No gain (severe scabies)	Wheat Sugar	4 wk. 0	2 wk. 6 oz.

*Same child

ed specific.

Nine of the children were under one year of age, while the rest were between one and five years. The older children seemed to respond even better than did the infants.

Dennett and others feel that in infancy the routine use of some food substance containing an adequate supply of Vitamin B is well justified by reported experience. This provision can be made by using wheat germ sugar in place of any of the usual carbohydrate additions to the formula. Whether or not such routine use is necessary is as yet a question, but certainly in many cases, where a deficiency is evidenced by symptoms, this substance gives good results. For older children, the same substance or brewers yeast prove valuable in supplementing a diet which for various reasons may be low in the required vitamin.

Summary

It appears that many infants and older children suffer from a deficiency of Vitamin B in their diets. Such deficiency can be prevented or remedied, and clinical improvement can be obtained by the use of an ordinary diet rich in the vitamin or by the use of additional substances which supply the missing factor. Wheat germ sugar and brewers yeast seem particularly valuable in such cases.

In nearly all of a small series of cases of children with symptoms indicating Vitamin B deficiency, improvement in weight and general wellbeing followed the administration of the vitamin.

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DISCUSSION

Dr. Norma P. Dunning, Rock Hill:

I have nothing to report on the use of brewers' yeast tablets in children, but I had a very interesting case of a woman of (I should judge) about thirty-five who was very, very thin and who has been trying to gain fifty pounds. You can judge from that how thin she was. She has tried all sorts of tonics, and last year she drank two quarts of milk a day besides eating good meals; she has a good appetite. She had gained up to twenty or thirty pounds. Last year she had an attack of influenza in Johns Hopkins Hospital and came home very thin. (She is in the infirmary; she is not really in my charge.) She asked me if I could suggest anything, and I told her to try brewers' yeast tablets two or three times a day. She has been gaining a pound or a pound and a half a week and is convinced that the yeast is helping her. Strangely enough, she ran out of tablets two or three times and it was about a week or ten days before she could get them again, and each time she lost weight.

Dr. Roe E. Remington, Charleston:

I think Dr. Waring is to be commended for making some systematic studies on a subject that concerns us all. We are in the habit of speaking very glibly about these vitamins, of which we know very little. At the last meeting of the American Chemical Society, a half-day symposium was devoted to the study of vitamin G, the pellagra-preventive vitamin. It was brought out in this discussion, and I think it was felt by all of us, that there is no such thing, even in an experimental animal, as an uncomplicated avitaminosis. Unfortunately, we know very little about the multiple fractions of the B vitamin. We know still less about their occurrence in food products, whether they be fruit juices or anything else, and know still less about the effect of variations in soil, climate, etc. on these food products. Anything one can do, whether experimental or clinical work, is bound to be interesting.

Dr. Waring, closing the discussion:

I have nothing more to say except that I do not want to suggest that special provision for the B

vitamin is necessary for every infant, as has been suggested by some workers. Some infants with symptoms pointing to vitamin B deficiency do not respond at all to its administration. The routine use of it, just as of orange juice and codliver oil, has been advocated by some; but I do not believe that it has been proved necessary for every case, especially since the response to treatment is rapid.

*EFFECTS OF PREGNANCY ON TETANIA-PARATHYROIDPRÆVIA

*By F. Eugene Zemp, B. S., M. D., Columbia,
S. C.*

One hundred years ago, Steinham described that form of tetany which occurred in the pregnant woman, and one year later Dance published his observations. Trousseau, in 1854, proposed the name of "rheumatic contracture" of nursing women. Von Jachke states that outspoken tetany in pregnant women is very rare. This seems to agree with the observations of Niderehe in Vienna who collected three cases in 10,000 births and of Adler and Thaler who saw nine cases in 10,000 births over a period of ten years. In none of these cases had any of the parathyroid glands been removed, but they simply indicate the relationship of tetany to pregnancy. Frankl-Hochwart, Kehrer and others have shown that chronic tetany is apt to become acute during pregnancy. Hoffman and others have noted that the severe loss of blood at birth has a decided influence on the development of tetany. The condition is much more frequent during the last three months and is apt to recur during subsequent pregnancies.

Vassale, and Generali, Thaler and Adler, Halstead, Massaglia and Zanfragnini have shown that pregnancy might induce severe tetany in dogs that had survived partial parathyroidectomy for long periods of time, without manifestations of tetanic symptoms. Erdheim showed the effects of gestation on tetany in rats by extirpation of the parathyroids. An accessory parathyroid prevented immediate development of tetany, but towards the end of two successive pregnancies definite tetany developed and in both in-

stances it disappeared with parturition. Kehrer, in a series of experiments, found that the removal of three of the four parathyroid glands in pregnant cats and dogs, almost invariably led to severe and often fatal tetany, although a similar operation on non-pregnant animals did not in the majority of cases produce tetany.

Larson and Fisher showed that a decrease in the calcium of the blood serum invariably accompanied the onset of tetany in the thyro-parathyroidectomized dogs and recently in their experiments on pregnant dogs, have shown that there is a decrease in the blood serum calcium during pregnancy and lactation of parathyroidectomized dogs, indicating a greater demand on the calcium metabolism. MacCallum, W. G., and Vægtlin and also Collip, J. B., and his associates have conclusively shown that a decrease in the blood serum calcium accompanies tetany and that the parathyroid hormone is the chief factor in regulating the calcium metabolism. In 1925, Collip isolated the parathyroid hormone and he has been able to relieve tetania-parathyroidprævia with it by regulating the calcium metabolism. Since then, Hæg, Rivkin and others have been able to control tetany by the use of this hormone. Pratt has reported cases which occurred after thyroidectomy which were completely controlled by its use in conjunction with calcium. Brougher recently reported four cases of tetany following subtotal lobectomy, the symptoms in two of which developed soon after the operation and in the other two, it developed during pregnancy. These were controlled with calcium, cod liver oil and parathyroid extract. Later, viosterol was substituted for the cod liver oil. Gleich and Goodman and Stern have also reported relief of tetany with viosterol.

CASE REPORT:

No. 6990. Mrs. R. B. W. Age 29. Married. Admitted to the hospital May 6, 1928 with a diagnosis of exophthalmic goiter. Family history essentially negative. Past history: Health always good; usual childhood diseases. Tonsillectomy in 1915. Operation for fistula in ano in 1922. Present illness: About 5 months ago, patient noticed that she was quite nervous, sleeping poorly, restless and emotionally unstable. A short time later,

*Read before the South Carolina Medical Association, Florence, S. C., May 7, 1930.

she found that she was "trembling," her hands would shake, etc. She consulted her physician who gave her medicine with no results. Two months ago, she was admitted to a hospital in Philadelphia where she remained for five weeks. During this time she was given medical treatment with slight improvement. Recently, the thyroid gland has become larger, voice husky, and she is extremely nervous. Physical examination: Patient lying in bed, extremely nervous, nutrition poor, color fair, skin shows mild acne. Ears and nose are mostly negative.

Eyes: Slight exophthalmos, von Graefe positive, good convergence, Dalrymple negative, Joffrey negative. Jellinck negative. Pupils react normally to light and accommodation. Throat essentially negative. Neck: Large, pulsating thyroid. A few nodules palpable. A loud systolic murmur over the gland. Chest essentially negative except for dulness in the first and second left interspaces. Pulse 104. Abdomen essentially negative. Extremities: negative except for tremor of the extended fingers. Laboratory: Hemoglobin 75%; W. B. C. 6,400; Urine negative. Blood pressure 155-60. X-ray report: Normal upper mediastinal shadow, slight enlargement of heart through the base. Lungs show evidence of chronic bronchitis. Basal metabolic rates: March 19, 1928, plus 78; March 26, plus 34; April 11, plus 18; April 18, plus 24; May 8, plus 68; May 20, plus 107.

Pre-operative treatment: For one month, she was given usual rest treatment with Lugol's solution, M. 10, three times a day, and sodium bromide Gr. 5, three times a day. Condition became worse.

Operation July 1, 1928: Sub-total Thyroidectomy.

Pathological report: Glandular hyperplasia and many distended acini filled with colloid material, with many foldings and much epithelial reduplication, showing this goiter to be of adenomatous and colloid type.

Post-operative treatment: On May 5, 1928, 4 days after operation, the patient developed mild symptoms of tetany which were relieved by calcium orally. Two other mild attacks developed during the 3 weeks stay in the hospital, and each time responded to calcium.

Five weeks after the operation, patient developed a very severe attack displaying all of the cardinal signs as Chevoteks and Trousseau's, marked carpo-pedal spasm, dorso-flexion of the foot and toes, stiffness of the neck, feeling of marked constriction in the throat, numbness, etc. Temperature was normal, pulse 64. Parathyroid hormone was not available, calcium by mouth had failed to give relief, so calcium chloride, 10 cc. was given intravenously, and morphine hypodermically. There was a slight improvement in the condition in two hours, when another 10 cc. of calcium was given intravenously. In 6 hours after the beginning of the attack, the spasm had almost completely let up. There was still a slight drawing of the face and stiffness and drawing of the hands and feet, and musculature in general. Calcium lactate was started orally, 60 grains three times a day. She remained in this state until the third day when relief was obtained with 15 units of parathyroid hormone intramuscularly. Calcium was kept up orally. Three days later, she started into another attack which was again relieved by the hormone. From this time on, calcium was given orally 30 grains three times a day, and parathyroid hormone 1 cc. intramuscularly at 3 to 4 day intervals. She was essentially free of symptoms for a month on this program, when the amount of calcium and hormone was cut in half. During part of this period, thyroid extract was also given because her hair became very dry and brittle and began to fall out.

On October 23, 1928, after 3 months on the above treatment, the interval between the hormone administration was lengthened from 3 to 4 day interval, to 7 to 9 day interval, when a rather marked attack developed which lasted 4 hours. It was relieved by a double dose of the hormone. The calcium was continued as before and hormone given at 3 to 4 day interval. On November 11, the patient again developed a slight attack which was promptly relieved by an increase in the dose of the hormone, following which the same program as above was continued. She remained free of symptoms for the next 6 weeks. At this time, an attempt was made to stop treatment when on the eleventh day she

developed another attack which lasted 5 hours. It was relieved by a double dose of the hormone. Calcium was continued by mouth 30 grains a day and hormone 1 cc. at 4 to 6 day interval. This was kept up for over 6 weeks during which period she was free of symptoms. The last dose was given on February 17, 1929. GAL. 5—Med. Journal—Zemp Art. cont.

During the above period of treatment, patient had been menstruating normally at monthly intervals. On February 1, 1929, she menstruated for only 1 day. On March 7, 18 days after the last dose of the hormone and calcium, the patient came into the office and said that she never felt better in her life, and that she felt like her old self for the first time. She had been and was still entirely free of symptoms. Menstrual period had been due around March 1, but had failed to appear. As she had menstruated for only 1 day the previous month, pregnancy was thought of, but could not be diagnosed until a month later. Patient continued to be entirely free of symptoms throughout the entire period of gestation and gave birth to a normal child on September 13, 1929. During this period she had continued to drink a quart of milk a day for the calcium content.

There was no return of symptoms until October 3 when she began to have an attack. Calcium orally failed to relieve her, so hormone was administered. Calcium was continued 30 grains a day, viosterol (irradiated ergosterol) 5 minims three times a day was also given, and parathyroid hormone 1 cc at 3 to 4 day interval. In 2 weeks, the dose of the calcium and hormone was cut in half, and she continued on this program for 3 weeks when all treatment was stopped on November 19, 1929. Five months have elapsed since that time without any return of symptoms.

DISCUSSION

The case is clearly one of tetania-parathyroidprævia following thyroidectomy due to injury at the time of the operation or a removal of one or more of the parathyroid glands. The symptoms were satisfactorily controlled with calcium and parathyroid hormone for 7 months during which period

several attempts were made to stop treatment with a return of symptoms each time.

With the event of pregnancy, and it seemed as if it were at the moment of conception, there was a marked improvement in the patient's condition, and all treatment was stopped without the return of any symptoms. This improvement continued throughout the entire period of gestation and partuition. Fourteen days after partuition, there was a return of symptoms which was attributed to a depletion of the system of calcium and parathyroid secretion due to the removal of the stimulus contributed by the pregnancy. The system was restored to normal by the administration of calcium, viosterol and parathyroid hormone which were kept up for a period of 7 weeks, and then stopped. Five months have elapsed since then with no return of symptoms.

What is the relationship between calcium metabolism and pregnancy? We know that pregnancy creates an extra demand for calcium, therefore, increases the metabolism. We know that it stimulates all the glands of internal secretion making them much more active. We also know that during pregnancy there is no formation of the corpus luteum. Therefore, in this case was the beneficial results of the pregnancy due to its bringing about an hypertrophy of the parathyroid glands causing them to be more active or was it due to the absence of the corpus luteum. As menstruation has again been resumed and the patient is still free of all symptoms, we are inclined to believe that it was due to a compensatory hypertrophy of the parathyroid glands initiated by the pregnancy.

CONCLUSION

- 1 Tetania-parathyroidprævia can be controlled by the use of calcium, viosterol, and parathyroid hormone.
2. The effect of pregnancy on tetania-parathyroidprævia was beneficial in this case.

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DISCUSSION

Dr. LeGrand Guerry, Columbia:

I suppose Dr. Zemp wanted me to open this discussion for the reason that I am, I suppose, partly responsible for the tetany, having operated on this case. Of course, the internists are always trying to get the surgeons into a muddle, and I think they succeeded pretty well in this case.

I want to call attention to the fact that this patient had had a great deal done for her, not only in this state, where we may not know much about the thyroid, but certainly the handling of this case and giving of large quantities of iodine over a long period of time in a perfectly futile effort to cure what was definitely a surgical case from the beginning was done in a city where certainly they know about the thyroid.

I think Dr. Zemp has presented the review of the literature and the clinical history in this case very well indeed. This is an extremely interesting case. With all the research he has done, this is the only case where there was a pregnancy following definite parathyroid-prævia. When this condition came about, when we were certain this patient was pregnant, the big question in a practical way was what we were going to do about it, whether we should abort her in a month or six weeks or let her go on. As you would expect, the professional camp was divided; about fifty per cent felt we ought to abort. For one time, the surgeon was conservative. We felt that possibly the best thing for her would be to let her go on, if she could. Experimental work today on animals, etc., would indicate that the proper thing to do would be to empty the uterus and see what happens, on the theory that pregnancy creates a tremendous demand on the parathyroid for its hormone. But my view about the thing, shared in by some of the others who were consulting, is that it is a rather common observation clinically that women will improve in physical condition during their gestation period; there is increase in weight, increase in blood supply, increased calcium. My feeling was if we would leave her alone (she was very anxious to go on) this increased vitality, increased metabolic rate, increased vascularity of the organs, would affect what she had left of the thyroid and also what, if any, of the parathyroid was left, because I do not believe we removed all the parathyroid. One interesting thing about this case was the improvement in her condition, and the ability to leave off her calcium and her parathyroid hormone occurred almost at the time of the beginning of her pregnancy. She went along nicely; she had one little flare-up which we thought would make it necessary for her to take the calcium and parathyroid hormone, but it did not. She went along and delivered a normal child, and now, five or six or seven months after the birth of the child, is apparently perfectly well. Of course, one swallow does not make a summer, but I think that is significant and it may be helpful to others who find themselves faced with such a predicament as that.

I think we must bear in mind and never lose sight of this fact—that the cystic areas in these adenomas represent a rest area, and it is from the active hyperplastic areas in the gland that these people get the toxemia. These adenomatous thyroids are so frequently mixed; there is an adenomatous thyroid and a hyperplastic thyroid all at the same time. But the point is that the toxemia is coming from the hyperplastic areas of the gland rather than from the cystic areas of the gland.

Dr. Roger G. Doughty, Columbia:

This case was admirably presented by Dr. Zemp. I had the privilege of seeing it in connection with Dr. Guerry. I think it presents exceedingly well what I was trying to point out in discussing Dr. Prioleau's paper. Here was a woman treated for a long time with iodine. Iodine produced cystic degeneration and consequent improvement. Nevertheless, in spite of the prolonged iodine treatment, the cystic areas became

interspersed with innumerable developing hyperplastic areas from which she got a profound toxemia.

One interesting thing about the case was the way in which it was determined what course to pursue. The laboratory work and experimental work all pointed to the frequency with which dogs had tetany in severe form after they had had their parathyroids taken out and were allowed to become pregnant. Most of them died. On the clinical side there was the definite observation, which is quite common, that a great many women during pregnancy have definite hyperplasia or hypertrophy of the thyroid. The reasoning was that if this occurred in the thyroid in answer to the increased demand of the body for thyroid secretion, so it might occur with the parathyroid; and with the increased demand, instead of complete breakdown, as the laboratory work indicated, might she not have hypertrophy of the parathyroid similar to hypertrophy of the thyroid? It is quite certain that the proper course was pursued; it is almost certain that a hypertrophy of the parathyroid¹ has occurred. Whether it has occurred as a direct result of the pregnancy I do not think anybody can say flatly and definitely, but the sequence of events is such that it would strongly suggest itself to one's mind.

Dr. William Weston, Columbia:

It seems impossible for one to forego speaking about his hobby when the opportunity presents itself. This subject, so interesting presented by Dr. Zemp, opens up a most inviting field for speculation. The factors responsible for the function of the parathyroid, the thyroid and all other glands of internal secretion depend upon a number of factors. Iodin controls their rate of function.

The functions of the parathyroid and thyroid glands are decidedly different, but it would not be appropriate at this time to consume your time by discussing them. There seems to be a fixed decision on the part of physiological chemists that the parathyroid is concerned in calcium metabolism and injury to those glands results in a disfunction of calcium metabolism. It does not appear, however, that the parathyroids are the sole factors in this determination, because the Mellanbys of England have recently demonstrated by feeding experiments upon puppies that there exists a substance or factor in oatmeal that exercises a powerful decalcifying influence. They have shown that by boiling the oatmeal with a one per cent hydrochloric acid solution and then neutralizing it with soda this factor was destroyed. I have claimed for several years that all cereal grains from which the corticle and germ portions have been removed in the process of milling exercise a decalcifying influence, and this is true regardless of the functions of the parathyroid gland or the presence of vitamin D.

It seems to me that this is an important matter for surgeons to remember.

Dr. O. B. Mayer, Columbia:

After hearing Dr. Zemp's very delightful paper I should like to make a few remarks. The symptoms developed several weeks after operation. This fact

would point out that the parathyroid was not destroyed at operation but rather that a degenerative process developed gradually, as interference to the nerve or arterial supply. This case brings to mind several tetany cases of my own; one in particular seems similar. The first symptoms this patient complained of were pains, cramps, numbness and drawing. Later there was cramp that required morphin to relieve. The condition, of course, was recognized, and the response to parathyroid hormone was most gratifying. This patient was treated subsequently by small doses of the hormone, as indicated; and she was also given calcium chloride and codliver oil. In addition, I think it is important in these cases to stress the value of a fresh vegetable diet, milk, sunshine, fresh air, and due regard for the emotional stress the patient is under. All the elements of stress should be removed. This patient is progressing nicely and has not had an attack for several months. I wish to congratulate Dr. Zemp upon his success.

Dr. Zemp, closing the discussion:

I wish to thank these gentlemen very much for their wonderful discussion of my paper.

There is one point I want to mention, which was brought up in the discussion; that is, the question of aborting this woman when she became pregnant. I was on the other side from Dr. Guerry and felt that we should. All I had read indicated that during the latter months of pregnancy tetany was more apt to develop, and also at childbirth. As improvement started at pregnancy, I felt that at about three months would be a good time to abort her and save the development of tetany later. My reason was that I felt this improvement was due to the stimulus of pregnancy, bringing about hyperplasia of the remaining parathyroid glands and an increased secretion sufficient to prevent tetany. This change having taken place, a relief of the pregnancy would probably afford a cure.

*BIRTH CONTROL AMONG THE POOR

By T. H. Dreher, M. D., St. Matthews, S. C.

I have, strange to say, read little, and heard less before medical conventions, on the subject of "BIRTH CONTROL". I may be wading in deep water. If so, I ought to be accustomed to it as I have been in the stream, theoretically at least, for a long time. I hope a personal allusion is not in bad taste. It may seem odd for a married man, unblessed with a child, and that misfortune the supreme disappointment of his wife's life, to have such pronounced views upon this subject. It is said that if you wish the best advice about rearing

*Read before the Ridge Medical Society, December 15, 1950, Batesburg, S. C.

children, all you have to do is to step around the corner to an old married couple, who have been in conjugal harness over 40 years, and never increased the population. I specify, "Birth Control Among the Poor," because it is pretty generally known and observed, that the upper crusts of society are already practising it, to a great extent, though our leaders and politicians "pooh-pooh" it, but too cowardly to sever the legal shackles which officially prevent its dissemination, where most urgently needed.

The subject is not new. Over one hundred years ago, Doctor Malthus tackled it, and narrowly missed the mob for his pains. As I said, it is still taboo in many quarters. Highly needed reforms usually come slowly. As a boy, I was a thorn in my father's side along this line. He was a scriptural enthusiast and knew that the Bible recommends one's "quiver full" of children. From these premises he reached the conclusion that the Lord should be the judge and guide in parceling out the size of the family. He overlooked the fact that the stern command was first given when there were only two people. The second time, I think, there were just eight that came out of the Ark. The world certainly did need replenishing in those days. I cite an instance, which comes close home, with reference to the feeling about population. As a college student in debating societies, we could never win a decision against indiscriminate immigration to this land of the free and the home of the oppressed of all the earth. A politician dared not risk his scalp against it. That was only about 40 years ago. How is it now? He would hardly risk his scalp for it, unless with a constituency of fresh Dagoes or similar aliens. In 1796 there were, in round numbers, about 5 million people in this country. Just 134 years later, there are more than 122 millions. It is high time to put up the bars. At the rate we have been going, it will not be many generations, before our descendents will be eating rats and mice like the Chinese coolies. It's a pity that we hadn't learned immigration sense, like Canada and Australia, long ago. Surplus populations, not only cause most of our home troubles, but bring on many a bloody war. This had much to do with Germany's downfall. "More room—a place

in the sun" was the cry. Those "Sauer-Krauters" were increasing at the rate of 800 thousand a year, upon an area that could almost be put in the overcoat pocket of Texas. Since the war they have greatly reduced the percentage of output. Mussolini, like the Kaiser, is now a monumental menace. In 1800, his little hob-nailed boot peninsula, had 17 million population. It now has 50 million. In spite of this increase, on a small area, nearly half of which is rugged and mountainous, Mussolini is squalling for more "cannon fodder," prizes are being offered for big families, and the bachelors are heavily taxed.

Away back yonder, over 300 years ago, the good old Martin Luther may have had some excuse for declaring that, "if women become weary bearing children or even dying, let them die. They are here to do it." Of course, like the war-makers, the Lutherans and Catholics were then fighting as hard for numbers as they were against each other's doctrines. It is really comical, now, to hear of the Pope and his priests, celibates themselves, hurrying and harrowing poor women into bringing forth all the children possible, that a peculiar Lord and heartless husbands can corral.

It may, at first sight, seem a strange pronouncement to charge medical science with being largely, but humanely, responsible for the need of birth control—especially among the poor. Our great profession has been, and is, the most unselfish and the most magnanimous of all professions in the world. Its pocket is not filled by engaging in the most wide spread and far-reaching propaganda ever known for the prevention of disease. Until not so many years ago, 1 to 2 out of every 5 babies died in the cradle. Now, a very small percentage, as we all know.

So late as 1924, England's birthrate exceeded the deaths by about 2 to 1, and most of them lived. The little Island was being rapidly overpopulated. England got wise in a hurry. Since then her birthrate has been decreasing proportionately.

The world's population has been doubling about every 60 years. Commonsense ought to tell us that this can't go on indefinitely without deleterious results. It is now about two billions. Figure it up and see where it will go before many centuries. The great

trouble with nations, as with most individuals, is there is little vision about the future. Poor old China is solving her vastly excess population by her ignorance and backwardness. So late as 1909, 87 per cent of her children died. God forbid that this should ever be our remedy. Contrast our case. About a hundred years ago the deathrate was about 21 to 22 per thousand. It is now about 11 per cent. This brings me to the point again that the medical profession is largely responsible for the need of birth control. Think of the millions of lives that have been saved by medical discoveries.

I would weary you foolishly my readers by detailing the serums that have kept their myriads out of premature graves with smallpox, tuberculosis, diphtheria, yellow fever, typhoid, malaria, syphilis, and many others. Thus medical science has not only increased life expectancy, but it, as I have said, has saved its millions. Is it then a far cry or a foolish call to the same profession, which, having done its noble work, that it now go forward to help save the world, by equally legitimate means, from the misery, squallor, and poverty incident to unreasonable and unassimilable millions. We are told that there is yet plenty of room. If so, why have we put up the bars against the hordes that are now knocking at our doors? And why the call more strenuous every year for tighter barriers? We know and they know that breadlines, raw poverty, and surplus populations, in some quarters, have been with us for years and getting worse. Over a hundred years ago, England's great political philosopher, John Stuart Mill, wrote that a man, who brings a child into the world without a reasonable prospect of supporting and educating it commits a crime against the child and against the government.

You have often heard the "nigger" as the great bugbear in the path of birth control. That they breed like rabbits, and no desire for a change. That, with birth control on one side of the hedge, and the negro, on the other, spawning their millions, the Caucasian race will eventually be put out of business. I do not "shoo" this spook lightly aside. It is more than a ghost. The Chinese and Jap menace on the Pacific Coast was met by ex-

clusion and gentlemen agreements. It is far different with the negro. It is useless to deplore the misfortune of bringing him in as a slave, for pillage and gain. But for that, the problem would present no special difficulties for centuries to come. It cannot be met like that of the Chinese and Japs. They are here, not only in great and increasing numbers, but here to stay. All physicians in the South know that poor negro women, with 5 or more children, when a link snaps in the chain of maternity, frequently approach us for "breeding medicine." But my experience is that the numbers of these ignorant and willing overbreeders are rapidly decreasing. In my town, I notice a decided tendency towards smaller families among the better and more educated classes.

We now know the fervent desire and enthusiasm for as much education as possible that percolates in every stratum of their ranks. This leads me to believe that, in the coming years, there will be more and more encouragement on this score.

One of the most pathetic and forlorn features of the general practice of medicine is to see a poor, emaciated woman, ground down by poverty and distress, giving birth to child after child, rapidly and unwillingly, and pleading pitiably for a surcease from her sorrows.

To make matters far worse, the mother (and frequently the father) is little better than a doddering idiot. It is increasingly discouraging to contemplate the heavy baggage of morons to be carried by the normal element of the country. It is the irony of fate, and one of the mysterious dispensations of Providence, that every faculty bestowed on the human biped—and especially morons—seems to become impotent long before that of the procreative machinery. What is about equally deplorable is the mock modesty and piety of the government, and the indifference of all uplift agencies towards the evil.

Lest I weary my readers, I will mention only one more objection to this reform. It is contended that the general use and spread of contraceptives would eventually deplete the world population and encourage those, physically, mentally, financially, and morally fit to have children, to become recreant to their

duty along this line. That such is the case already, in numerous instances, cannot be denied. But this brings up the age-old question whether it shall be the greatest good to the greatest number, or dissipate the blessings to the many, in order to punish a few delinquents. As a matter of fact, that diminutive class, with rare exceptions, are already wise, and will pursue the even tenor of their way, regardless of what is said and done by the rest. This feature can be easily disposed of. The desire for progeny is implanted in the human breast. Normally, it is an instinct. So much so, that where there are no obstacles, it is an abnormal couple that looks at it otherwise. It finally resolves itself into the suspicion that such people are unfit for paternity or maternity, and the world has lost little or nothing by the extinction of the breed.

Needless to say that this should be a world problem. It is as sadly essential as World Courts and Leagues of Nations, to stop wars. Germany's increase in population is markedly diminishing since the World War. The blatant cry of the rulers for more "cannon fodder" to fight the next war, is being greatly ignored, as it should be.

When the government of Holland let down the barriers in order to restrict her surplus population there were all sorts of dire predictions about results, but they have not panned out. She gets all the people she needs but no distressing surplus to unload on other nations. It is a calamity that China and Japan don't follow suit. There are said to be more suicides in Japan, in proportion to

numbers, than in any country on the world. Without birth control it will go on from bad to worse.

These are a few of the salient facts about this big subject. Only a small voice in the world's wilderness. But it takes the drop by drop to wear away the stone. Every little is a help as the old sow said when she snapped at the knat. The mosquito is not afraid to stick his poniard into the hide of an elephant. I am not the first, but one of the few backwoods country doctors, who has never faltered along the way.

I realize that there are still many, who look upon such doctrines, as not only unwise, but highly immoral. Next to the church, I consider it the hope of the world. What a pity that most of these little circuit-riders of the country, carting their impoverished broods from place to place, can't see it in the same light. Only recently, I received a severe reprimand from a pious old gentleman, who looks with horror upon such heretical views. That is to be expected. Some time ago, a lady, sent by the government, dropped into my office and asked for my cooperation in rounding up the old midwives and teaching them some of the elementary modern principles of hygiene and antiseptics. I heartily commended her work, and promised every assistance. I told her, however, that she and the government were short on one feature. That while, teaching them how to bring the young Ham-ites safely into the world, she should also post them on legitimate preventive measures, to keep a lot of them out.

THE UROLOGICAL ASSOCIATION OF SOUTH CAROLINA

PRESIDENTIAL ADDRESS

By Marion H. Wyman, M. D., Columbia, S. C.

UROLOGICAL MEDICAL WRITING— CHOICE OF SUBJECTS

In casting around for a subject for a presidential address to present to this organization today I did not select a purely scientific medical subject for I have the feeling that presidential addresses should aim at broader subjects; some policy more particularly for the good of the organization as a whole. Since the summer of 1913 I have confined my practice to the field of urology. It is certainly gratifying to now find myself, an "old urologist," in the position of President of an organization composed of a group of highly energetic, enthusiastic, capable and promising physicians, most of you relatively young men.

In presenting a subject which has to do with the dissemination of special urological information to the general profession I do so with the realization that to accomplish results seems almost impossible and beyond our past methods. We have tried, and are still trying to show and prove the value of urological studies and early consultations. However, we daily see the lack of use of our facilities and apparently a disregard on the part of some physicians, with otherwise large practices and good reputations, for the necessity for urological studies. Every member present, if he does not actually know of unnecessary operations on other organs, particularly the appendix, when the urological tract was at fault, knows how apparently loathe some of our best trained surgeons and medical men are to refer cases to us for study.

Of the several methods we have at our disposal for informing the profession of the

potentialities of urology, I am touching principally on the art and value of writing. I would like to throw out, however, in passing that we should ever be alert, not in a boastful, patronizing way, but rather in a tactful manner by personal conversations, personal demonstrations and otherwise, to let all know *what* we as urologists really can do in the way of diagnosis and treatment. One avenue that we have neglected as an organization has been the "Department of Urology" in our State Journal. This department has been sadly neglected not only under the present associate editor, but under most former associate editors, including myself.

If a specific subject has to be assigned to this paper probably the most appropriate title would be "Urological Medical Writing and Choice of Subjects."

The motive prompting us in our efforts in medical writings is, and should be, a desire on our part to let others know our thoughts, experiences, observations and conclusions. Our choice of subjects, language, and ideas depend to a large extent upon our audience, whether composed of general practitioners, special workers in other fields, or a mixed audience. Of course, in preparing a paper for urologists we bear in mind that our audience is a highly trained group of men, whereas in preparing a paper for general practitioners, we have to ever remember that our audience has not gone into the details of our specialty as extensively as we have. Without being patronizing to special workers in other fields and general practitioners, our papers to these audiences are usually with the idea of selling ourselves and our specialty to them, showing them the benefits they and their patients may derive from consultations with us. This, of course, applies to special workers in all branches, but this applies more particularly to our specialty where diagnoses such as in abdominal conditions are obscure.

*Presented to the Urological Association of South Carolina at its semi-annual meeting, Orangeburg, S. C., November 25, 1930.

All of my former papers, with one or two exceptions, have been prepared with the idea of putting something over to the general practitioner and surgeon. In the majority of these papers I attempted to show the potentialities of urology as a tremendous aid in otherwise confusing surgical diagnosis and in instituting early proper treatment.

There is a little book published by the Editors of the American Medical Association entitled, "The Art and Practice of Medical Writing." I mention this book because it has a great deal of useful information, touching on subjects as I have today, and having to do with the proper good form in composition and general editing of medical writings. It, of course stresses terseness in our statements, and emphasizes the use of the simplest words possible and the avoidance of highly technical and confusing terms.

In conclusion I wish to make some recommendations and to reiterate and stress the necessity for ethical publicity, the publicity not to be directed to ourselves as individuals, but rather to ever impress the potentialities of urology as a highly specialized diagnostic and treatment branch. I am beginning to see and feel it in my own practice and believe the day will come when patients themselves and referring physicians from a distance will seek us directly as urologists and not through some local diagnostician or surgeon. We must admit that we have gained some headway not

only with the rural referring physicians, but with the laity as well for they come more and more directly to us or demand early consultations.

It is recommended and urged that we adopt at this meeting and memorialize the Editor-in-Chief of the South Carolina Medical Journal and his Governing Board (I believe the "Councilors") that our organization, "The Urological Association of South Carolina," be allowed to edit and be held responsible for the Urological Department of our State Journal. A separate committee of three could be appointed or elected, or possibly preferably the President, Vice-President, and Secretary-Treasurer of our organization could be held responsible parties to see that some worthy contribution is published in the editorial department of the Journal each month. We might also recommend and request that the committee from our organization be allowed to furnish at least one paper for publication in each edition of the Journal.

Finally, let us *write frequently* (always having reprints made and don't forget to mail them), let us *discuss papers frequently*, and above all let us discuss each other's papers when our members are appearing before some general medical organization such as our State Association. It is discouraging to us as individuals to prepare papers and not have them clearly and intelligently understood, appreciated and discussed.

SURGERY

Wm. H. Prioleau, M.D., Charleston, S. C.

TREATMENT OF INFECTED OPEN FRACTURES

It is well to consider at regular intervals subjects which are inclined to be relegated to a place of secondary importance, for in these subjects the results obtained are often far from satisfactory. Such is the case with the treatment of infected open fractures. The great number of motor vehicle accidents makes it important that we give this type of injury our renewed attention. This discussion is based upon the article of E. W. Hey Groves in the British Journal of Surgery of October 1930, page 294, in which he presents the usual causes of the poor results and the underlying principles of the proper treatment.

The common mistakes are neglect, delay, and errors of judgment. These cases should be given immediate attention just as much as acute abdominal or head injuries. Too often does delay permit of an extensive spread of infection and permanent damage due to circulatory disturbance. To merely apply iodine and splints is not sufficient; nor is it good surgery to do an extensive debridement and manipulation. The object of the primary treatment should be to remove devitalized tissue, provide drainage, and secure satisfactory alinement. Due to the primary injury some poor results are inevitable, but prompt and proper attention will reduce them to a minimum.

Before operation an X-ray examination should be made if it does not involve delay. This will give valuable information concerning the fracture, and reveal the presence of foreign

bodies. At operation sufficient exposure should be obtained, the wound cleaned and treated with an antiseptic, the devitalized tissue excised, and the free bone fragments removed, not those with soft tissue attachments. Proper drainage should be provided. At this time decision must be made whether to do a primary or secondary closure. Tetanus and gas bacillus serum must be given.

Though the primary treatment of the fracture is of secondary importance to that of the wound, it is necessary to secure satisfactory alinement and immobilization. This will prevent circulatory disturbance and undue soft tissue injury, and will favor the uniting of the fragments. The limb should be placed in a Thomas or cradle splint and gentle traction applied. This is best accomplished with adhesive tape. At first the traction should not be great, as it will interfere with the soft tissue healing.

A few days after the injury and as soon as the infection has been overcome, the fracture must be put up in such a way as to secure full length and good alignment, while allowing the continuance of the treatment of the wound. For this the one safe and efficient method is skeletal traction. The pin is far preferable to the ice-tongs caliper as the latter is apt to slip and cause injury to the soft tissues and considerable pain. Skeletal traction may be used in the upper extremity just as effectively as in the lower. Plates should never be used in infected open fractures. Adhering strictly to the foregoing principles, the author reports a series of cases in which very favourable results were obtained.

PUBLIC HEALTH

By B. F. WYMAN, M. D., Director of County Health Work, Columbia, S. C.

PRACTITIONERS OF MEDICINE AND DENTISTRY IN RELATION TO HEALTH PROGRAMS

It is the purpose of this sub-committee to present in its report some of the fundamental principles pertaining to the relation between practitioners of medicine and dentistry and the public health program. In general, it is evident to the committee that a better understanding and attitude of mutual help is developing between health agencies and physicians and dentists.

PUBLIC HEALTH ORGANIZATIONS

The plan of public health organization in the United States has been wisely developed for our form of government. Each State and local government unit is given legal authority to insure the protection of health within its own jurisdiction. The federal public health service has well-defined powers and it is not intended that its functions shall in any way conflict with the prerogatives and powers of state and local health departments.

The activities of the Federal Government in cooperation with the respective States for the protection of the public health should be conducted by the United States Public Health Service. In this way and in this way only will it be possible to unify effort, avoid overlapping, make for efficiency and simplify administrative procedure.

It is important that the duly constituted health agencies of the Federal, State and local governments shall be recognized as being fundamental and that they shall be ascendant in the control of health programs.

MUTUAL RESPONSIBILITIES OF OFFICIAL HEALTH AGENCIES AND THE MEDICAL AND DENTAL PROFESSIONS

There are certain phases of public health work which are especially well adapted for developing a constructive program of co-

operation between health agencies and the physicians and dentists of a community. The state and local health departments should advise with the medical and dental professions in determining such programs. The state medical and dental associations should appoint, for the benefit of the state health officer, advisory committees approved by their legislative bodies. Likewise, the district or county organizations should appoint advisory committees for local health officers. These committees will prove invaluable in adjusting differences, stimulating interest and in securing cooperation on the part of the practitioners. Practicing physicians and dentists are, and should be, the most important factors in safeguarding the health of the public. Therefore, any method employed in public health administration which tends to destroy the confidence of the community in these professions is not in the interest of human welfare, and should not be tolerated.

IMMUNIZATION AGAINST DISEASE

The health department is obligated by law to prevent in every practicable way communicable diseases in the community, and it is well within the province of a health officer to cause to be employed methods made available by scientific research for the control of disease. If there is a mutual understanding between the professions and health departments, such work can be done so as to make a definite contribution in this phase of service.

HEALTH CENTERS AND CLINICS

The work of health centers and clinics should be administered so as to integrate their service with the routine practice of the local physicians and dentists. The methods employed must not interfere with the relation which has so long existed between practitioners and their patients and which, on the whole, has been satisfactory to both.

LEGAL AND ETHICAL OBLIGATIONS OF PHYSICIANS AND DENTISTS IN THE CONTROL OF COMMUNICABLE DISEASES

At all times, it is the duty of physicians and dentists to notify the properly constituted health authorities of each case of communicable disease under their care, in accordance with the laws and with the rules and regulations of the health authorities. By observing these requirements, they render invaluable aid in the prevention of infectious diseases. Health officers can, in turn, be of assistance to practitioners in consultation for the diagnosis in suspected cases of contagious diseases. Cooperation of this character will increase public confidence in the health departments and in the professions.

QUALIFICATIONS OF ADMINISTRATIVE PERSONNEL

Adequate training and administrative ability of health officers should always be recognized as important factors in insuring efficiency and permanency of public health organization. Political expediency should not influence the appointment of public health officials who should be unhampered in dealing, on the basis of scientific principles and sound administrative practice, with public health problems. An outstanding need at the present time for the promotion of public health in this country is to make more secure the tenure of service of well-qualified workers. The removal of an efficient health official for political reasons alone should be an impossibility in any state or local unit of government. The remuneration of experienced, well-qualified personnel should be commensurate with the services which they render to the community.

ESTABLISHMENT AND DIRECTION OF HEALTH PROGRAMS

It should be clearly recognized that public health programs should be established and directed by official health agencies and that social service and welfare activities, when desirable in connection with such programs,

should be subservient to and coordinated with them.

EDUCATIONAL ACTIVITIES

It is desirable that the medical and dental schools of this country should take more interest in instruction in preventive medicine and public health on the right basis for medical and dental students. It is obvious that students who have graduated in the past have not always had opportunity to secure information on prevention, comparable to facilities and advantages afforded in clinical medicine and dentistry.

One of the most important duties of health organizations has to do with the dissemination of helpful information concerning the prevention of disease and the conservation of health. In fairness to the public and in the interest of scientific truth material purporting to be educational in character should be based on facts scientifically proven, or, in the absence of such facts, should reflect the best scientific opinion of the time.

The physician and the dentist as individual practitioners and in their professional organizations are under obligation to the public and to science to give to their patients and to the public practical information that will contribute to the promotion of individual and community health. This obligation is now being better discharged by representatives of the medical and dental professions in routine practice; they are instructing their patients concerning measures which are helpful in the observance of personal hygiene and in the prevention of disease.

These activities of the private practitioner in his proper share and of his societies and of public health agencies should be extended until the intensive practice of preventive medicine and dentistry has become routine in the everyday work of every qualified physician and dentist."

—Committee on Public Health Organization. White House Conference on Child Health and Protection. 1930.

INTERNAL MEDICINE

J. H. Cannon, M. D., F. A. C. P., Charleston, S. C.

CARDIAC CONDITIONS CONTRA-INDICATING THE USE OF DIGITALIS

Joseph Sailer, M. D.

ANNALS OF INTERNAL MEDICINE
Vol. 1, No. 2, May, 1928.

Since Withering introduced the Foxglove into medicine for the treatment of heart disease, it has been used whenever the heart was thought to be at fault. Such use and often abuse is not infrequently seen at the present time. One not rarely hears the remark that the treatment of heart disease consists of rest and Digitalis, applying this to all cardiac lesions, functional and organic.

The author states that while the symptoms of heart disease do not vary so greatly, there are fundamental differences in the pathology. The possible misuse of a drug that is so universally used in conditions more prevalent than perhaps any other demands our serious consideration.

For one to be always sure that digitalis is or is not indicated is difficult, for as the author points out, there is much about digitails that is not known. In spite of the great amount of work done with the drug both experimental and clinical, we do not yet know whether it is a cardiac stimulant or sedative. Furthermore, one finds oneself reasoning to the effect that, while there is not such a great variation in the symptoms of heart disease, a visualization of the wide variations of the underlying pathology, it is hardly logical to believe that a single drug action could be beneficial in every instance.

He has therefore attempted a rough grouping of heart disease from the therapeutic standpoint and attempts an analysis on the basis of the lesion as to whether or not digitalis could be expected to be of benefit in the light of our present knowledge. His grouping is as follows:

First. "Defects of Conduction—these include all forms of heart block, bundle block, arborization block, fibrillation flutter, and

probably there should be included among these the different varieties of premature contractions, because indeed the rhythmical conducting system is disturbed. Somewhat akin to these are disturbances in rhythm, particularly the paroxysmal tachycardias and nodal rhythm. Also akin to these are those disturbances which are due to conditions outside the heart such as hyperthyroidism, infection, effort syndrome and cerebral disturbances. Then and by no means entirely separate from some of the preceding conditions, we have inflammatory disturbances of the heart, acute endocarditis, acute pericarditis, and acute myocarditis—the latter rather a curiosity."

Second. "Chronic valvular diseases, and I have been much impressed as have many others, with the desirability of differentiating the effects of the different valvular lesions at least from the standpoint of treatment: Chronic obliterative pericarditis, the heart of old age or as Cohn prefers to call it the heart of senescence."

Third. "There is a large group of congenital forms of heart disease, concerning which we know comparatively little and for the treatment of which we have still less knowledge."

He quotes Cushney and Sollmann in supporting his belief in the harm of digitalis in incomplete block and that in complete block there are other measures of greater benefit than the drug in question. He points out that the improvement often attributed to inadequate doses of digitalis, in these conditions are really due to other factors, especially rest and the failure to do harm was due to doses so small as not to produce any physiological effect.

Bundle Branch Block: This not uncommon condition can be diagnosed as a rule only by the cardiograph and while it is regarded as a serious lesion, it may be compatible with many years of fairly comfortable life and some atypical forms which seem to interfere not at all with cardiac efficiency. Theoretically

digitalis would be contra-indicated. Information in the literature is scant but he is unable to find where any physician has recommended it.

Arborization Block: A condition in which the stimulus to the muscle may pass through the bundle of His satisfactorily, but is not distributed to the muscles bundles in a normal manner due to disease of the heart wall involving the Purkinje cells. Dr. Sailer says, "If it could ever be proved definitely that digitalis stimulates the heart muscle, improves its contractability, and the force of the contractions, it might be argued that the use of digitalis in these conditions would be a distinct advantage. However, if its effect of diminishing the conductivity of the bundle of His can be shown to extend to the other conducting fibres of the heart, then digitalis might be injurious."

In paroxysmal tachycardia and nodal rhythm it is generally conceded that digitalis is of no value, nor can the coupled beats and pulsus bigeminus, as are produced by over doses of the drug hardly be benefitted by the same agent.

Digitalis had no effect on the rate of the pulse in effort syndrome and had a bad effect on the patient in that it increased their nervousness and distress.

In auricular fibrillation associated with hyperthyroidism the author's impression is that digitalis is beneficial though some feel that the drug may be harmful, notably Plummer who has had a very wide experience in goiter.

In acute infectious diseases the question of the value of digitalis is still debated. In pneumonia it is probably used in vast majority of cases. Cohn advocated its use to combat

the fibrillation which not infrequently occurs. There is no doubt that even in large doses it fails to slow the heart. He states that "it must be admitted that its use in typhoid, pneumonia, and other infectious diseases has never been shown to be injurious." (More recently Wycoff and his associates have published their observations on digitalis therapy in pneumonia to the effect that their mortality was much lower in those cases not receiving digitalis than those who did.)

There is no evidence that it is of any value in acute endocarditis, myocarditis or pericarditis.

He feels that there is a question whether digitalis is beneficial in Chronic adhesive pericarditis—that it is a great comfort to the physician in giving small doses in the heart of old age and since there is no evidence that such doses rarely do harm, there is no reason why it should not be given. He feels it is very difficult however, to prove that it does any good. This of course, does not apply in presence of fibrillation which should be treated in the usual manner and quotes Marvin in advocating digitalis in the dropsies of Congestive heart failure.

He quotes O'Hare to the effect that digitalis is not contra-indicated in hypertension but feels that the burden of proof of just how it may be of benefit rests upon those who advocate its use in this condition.

(If I might be permitted a comment it would be that many if not most of the conditions mentioned by the author as questionable indications or actual contra-indications become of secondary importance should congestive heart failure develop when digitalis indication becomes positive. Associate Editor)

WOMAN'S AUXILIARY

South Carolina Medical Association

OFFICERS

Acting President, Mrs. L. O. Mauldin	Greenville
Vice President, Mrs. Carl B. Epps	Sumter
Recording Secretary, Mrs. C. W. Evatt	Greenville
Corresponding Secretary, Mrs. L. H. McCalla	Greenville
Treasurer, Mrs. J. W. Bell	Walhalla

COMMITTEE CHAIRMEN

Publicity, Mrs. W. C. Abel	Columbia
Extension, Mrs. William Boyd	Columbia
Historical, Mrs. H. M. Stuckey	Sumter
Hygeia, Mrs. J. R. Miller	Rock Hill
Legislative, Mrs. M. L. Parler	Wedgefield

COUNSELLORS

District 1, Mrs. W. W. Wild	North Charleston
District 2, Mrs. Ernest Cooper	State Park, Columbia
District 3	
District 4, Mrs. F. G. James	Geer
District 5, Mrs. A. W. Humphries	Camden
District 6	
District 7, Mrs. D. O. Winter	Sumter
District 8	

The executive board of the Auxiliary to the South Carolina Medical Association met at eleven o'clock Wednesday morning, Oct. 29th, 1930, at the Jefferson Hotel in Columbia, S. C. Mrs. L. O. Mauldin, acting vice-president, presided. The board discussed in detail plans and programs that be might instrumental in influencing the growth and usefulness of the Auxiliary. Mrs. William Weston gave a very comprehensive report of the convention of the Auxiliary to the American Medical Association, held at Detroit last summer. She gave a splendid account of the activities of the Auxiliaries in other states. Mrs. H. M. Stuckey, historian, reported the receipt of some interesting accounts of the lives and works of early physicians. She is very anxious to obtain as many accounts as possible and urges each local Auxiliary to send to her an account of the lives and works of the early doctors in each county. Each member of the board made a report on work accomplished. After the board meeting adjourned, those present enjoyed a luncheon. The members and representatives attending the meeting were: Mrs. L. O. Mauldin, of Greenville, acting president; Mrs. H. M. Stuckey of Sumter, historian; Mrs. A. W. Humphreys, president, and Mrs. W. J. Dunn, vice-president of the Auxiliary to the Kershaw County Medical Association; Mrs. M. L. Parker of Wedgefield, legislative chairman; Mrs. Wm. Weston of Columbia, National publicity chairman; Mrs. Wm. A. Boyd of Columbia, organization chairman; and Mrs. Wm. C. Abel of Columbia, state publicity chairman.

The Sims Memorial Committee met Wednesday, Oct. 29th at the Jefferson Hotel, Columbia, S. C. Mrs. Henry Mortimer Stuckey, chairman, presided. Mrs. Wm. A. Boyd, treasurer, reported that nearly one hundred (\$100.00) dollars still remained in the treasury. The committee voted to turn over this sum to the Auxiliary to the S. C. Medical Association

with the stipulation that the interest be used for the upkeep of the Sims Memorial Monument.

In the October number of the American Medical Association Bulletin there is a department devoted to the affairs of the Auxiliary to the American Medical Association. The National Auxiliary consists of thirty-seven State Auxiliaries, which totals a membership of approximately 12,000. It was organized in 1922. At four different times southern women have served as its president. It is encouraging to know that the work of the Auxiliary has become sufficiently important to be given space in the Bulletin.

The Auxiliary is an excellent medium through which to carry educational campaigns, always, of course, with the official sanction of the Medical Association. Mrs. W. J. Freeman, the Editor, says, 'The influence of 12,000 Auxiliary members can be multiplied many times through their membership in other organizations where they can introduce the leaven of scientific knowledge and a well-considered plan of action.'

The Bulletin will keep all physicians' wives in touch with Auxiliary activities and will also prove an education in the affairs of the medical world, thereby giving each physician's wife a better understanding of her husband's work, which will increase her prestige and importance in her daily social contacts, thereby making her influence valuable in educating the public to a higher appreciation of organized medicine.

Mrs. J. O. McReynolds, national chairman on press and publicity, urges every state to send in news of all the Auxiliary activities.

Mrs. Wm. C. Abel
State Publicity Chairman.

The Auxiliary to the Richland County Medical Society met Tuesday, January 11th, at the home of the Vice-President, Mrs. A. E. Shaw.

The meeting was very well attended.

The Auxiliary is making an effort to increase its membership and also to stimulate an active interest in the inactive members. At a former meeting Mrs. Wm. Weston, in her interesting account of the Detroit Convention, introduced maps showing the status of Auxiliaries in other States. South Carolina compared very favorably in the number of auxiliaries.

The Auxiliary to the Richland County Medical Association offers a prize of ten (\$10.00) dollars to the nurse who completes her three years of training with the best record. This prize is offered to the graduates of each of the training schools—the Columbia Hospital, the Baptist Hospital, and the State Hospital. The treasurer reported that the thirty dollars was already in the treasury.

After the routine business, Mrs. Shaw, assisted by Mrs. A. Earle Boozer, Mrs. R. H. Jennings, Mrs. Skottowe B. Fishburne, and Mrs. A. H. Madden, served tea, sandwiches and cakes.

The present officers of the Richland County Medical Association are: president, Mrs. R. B. Durham; vice-president, Mrs. A. E. Shaw; treasurer, Mrs. B. H. Baggott; and secretary, Mrs. Oscar La Borde.

The members of the Auxiliary to the York County Medical Society are widely scattered, and depend on doctors' cars to convey them to the meetings. Therefore, the meetings are not held regularly. However, the organization is active and when the call comes every member rises to the occasion. The doctors join the Auxiliary in two social meetings a year. In 1930, one banquet was given which included the doctors and their wives. The other social meeting took the form of a picnic, which included the doctors, their wives and families.

Mrs. W. C. Whitesides is president.

In the American Medical Association Bulletin for December, we observe the notation which mentions the Dr. James Marion Sims Memorial on the Capitol grounds at Columbia as a worthy achievement of the Auxiliary to the South Carolina Medical Association. The Ex-President, Mrs. H. M. Stuckey, receives a well deserved word of praise for her untiring efforts in bringing this project to a successful conclusion.

Mrs. W. C. Abel.

Publicity Chairman.

PANORAMIC VIEW OF THE WOMAN'S AUXILIARY TO THE A. M. A. IN FOUR ARTICLES

1. THE EASTERN DISTRICT

Mrs. W. Wayne Babcock

According to the Constitution of the National Auxiliary the first Vice-President is automatically Chairman of organization, the three other Vice-Presidents being organizers for their section of the country. Mrs. Southgate Leigh of Virginia, therefore holds this Chairmanship, and the Eastern District is her particular responsibility. At her request a series of four articles is being prepared by her committee in order that each district may be cognizant of the progress of its own state's as well as those of the other three sections. The individual state journals have been generous in extreme in the space they have allowed their auxiliaries and this additional courtesy of reporting the auxiliary situation in other states is deeply appreciated, for there is a growing desire to know "what others are doing."

New Hampshire stands alone as the only New England state 100% organized and cooperating with the National Organization. Last year the state auxiliary had misgivings as to its necessity and usefulness but

an urgent request from the medical society that the women remain organized, dispelled all doubts. During the year following, Mrs. Hubbard, wife of the State President, visited every county which encouraged and stimulated the growth of unit auxiliaries.

The New Jersey Auxiliary made pilgrimages to state institutions, set apart one meeting when the mothers of physicians were entertained, and sponsored various health meetings. The Essex County Auxiliary, assisted by the physicians, succeeded in establishing a course of health talks, in cooperation with the Y. W. C. A. of Newark, emphasizing especially prenatal care and information which would aid the mothers of babies and young children. Last year Mrs. James Hunter, Jr., New Jersey's State President, visited every county as did Mrs. Walter Jackson Freeman in Pennsylvania, during her Presidency. One cannot help drawing the conclusion that personal contacts are necessary for county development and success.

Virginia is active in spots. The doctors encourage the auxiliaries as they believe that through them education with regard to the menace of state medicine can be spread.

Ohio for several years has been sending representatives from a few organized counties to the National meetings but as yet there is no state organization. As our friend and advisor, Dr. Upham, lives in Ohio, it is felt that he will advise the National Auxiliary when the auspicious time arrives for the establishment of a State Auxiliary.

The District of Columbia seems so completely diverted with Washington affairs that the auxiliary which so capably cared for the A. M. A. meetings some years back seems to have gone into retirement.

Delaware in a breathless, better-late-than-never manner, has completely caught up and is most interested and active and has entered upon serious work by assisting the men of the profession in establishing a medical library in Wilmington. They will cooperate with Philadelphia at the time of A. M. A. and the eastern section will introduce them with pride to the National Organization. West Virginia is up and doing and you may expect still better things from that State this year.

Maine, Massachusetts, Rhode Island, Vermont and Maryland have reported the interest of individuals but no organized effort. Queries from different localities in New York as to why there is no auxiliary have been answered with the statement that several years ago the House of Delegates voted unanimously in favor of the auxiliary and authorized its organization. The same year Connecticut voted favorably but no definite steps have been taken.

Pennsylvania has surely discovered the rhythm in which its auxiliary work is best done, for concrete accomplishments have been turned out regularly, year by year. Of the three thousand dollars contributed last year to the Medical Benevolence Fund more than two-thirds was contributed by the Auxiliary. A definite trend toward educational meetings is felt all over the state and socially it is hoped that the carefully planned Philadelphia plans for the next meeting will bring

honor and glory to the Keystone State. Not only are the adult members of the auxiliary meeting but a group of the most charming and good-looking daughters of doctors are working together in order that they may know each other and work in unison for the comfort

and pleasure of the A. M. A. guests when they come to Philadelphia in May. Verily, who can question the wisdom of the auxiliary, when it brings about so much willing work in behalf of the medical men of the country?

SOCIETY REPORTS

ANDERSON COUNTY MEDICAL SOCIETY

The regular meeting of the Anderson County Medical Society was held at the John C. Calhoun hotel, Wednesday, November 12, 1950, at 12 noon. The meeting was called to order by the President, Dr. Thos. R. Gaines, with the following members present:

Doctors: Bare, Barton, Breedin, Clinkscales, Corbett, Chambers, Dean, Epting, Gaines, H. H. Harris, J. C. Harris, Hentz, J. W. Martin, Lee W. Milford, Nardin, Sanders, Smethers, Thompson, Townsend, Watson, Wrenn, J. R. Young.

The minutes of the October meeting were read and approved.

Business coming before the Society was that of appointing a publicity committee, the following committee being appointed. Dr. J. R. Young, Chairman; Dr. S. C. Breedin; and Dr. E. E. Epting.

It was voted to dispense with the December luncheon.

Dr. Lee W. Milford had charge of the "Scientific Program," his subject being "Some Conclusions from Physical Examinations of College Students with Lantern Slide Demonstrations." This subject proved to be very interesting and was enjoyed by all, it being fully discussed by the following Doctors: W. H. Nardin leading the discussion, J. E. Watson, E. E. Epting, H. H. Harris, J. O. Sanders, S. C. Breedin, Grady Clinkscales, and A. L. Smethers.

The meeting was adjourned for the regular luncheon.

D. J. Barton, M. D.
Secretary.

COLUMBIA MEDICAL SOCIETY

Medical Society Hall, November 8, 1950.

Annual election of officers.

Society called to order by the president J. Heyward Gibbes at 8:55 P. M.

Minutes of last regular scientific meeting read and adopted.

Suggestions for the president before entering election were (1) to post names of members who are delinquent in paying dues on the first of April each year. (2) to formulate plans to meet expenses of visiting men who address the society.

The election of officers: Dr. James S. Fouche elected president on first ballot. Dr. Theodore M. DuBose, Jr., elected vice-president on the first ballot. Dr. William Weston, Jr., re-elected secretary. Dr. Ben Baggott re-elected treasurer.

Board of census: Dr. Floyd Rodgers, Chairman continues for one year. Dr. Tom Dotterer continues for two years. Dr. F. M. Routh elected for three years.

Delegates to state convention: Motion that the society at the present be elected a delegate to the South Carolina Medical Association convention each year. Motion seconded and passed. Dr. T. A. Pitts, Dr. Roderick McDonald, Dr. Hugh Wyman and Dr. James Fouche delegates for one year. Dr. O. B. Mayer and Dr. J. Heyward Gibbes elected as delegates for two years. Dr. Burnside and Dr. Bristow elected as alternates.

The president appointed the following committees:

Auditing committee: Dr. Walter Bristow, Chairman, Dr. N. B. Heyward.

Scientific and Program committee consists of president Dr. James Fouche, vice president Dr. Theodore DuBose, Jr., and the secretary Dr. William Weston, Jr.

Committee on public health and legislation: Dr. S. M. Harmon, Chairman, Dr. T. A. Pitts and Dr. F. M. Durham.

Library committee: Dr. J. R. Allison, Chairman, Dr. T. D. Dotterer and Dr. E. W. Barron.

50 members present.

Motion to adjourn at 9:40 P. M.

Respectfully submitted,
William Weston, Jr.
Secretary.

COLUMBIA MEDICAL SOCIETY

Columbia Medical Society December 22, 1950.

Meeting called to order by the President Dr. James S. Fouche at 8:30 P. M.

Minutes of last business session read and adopted.

Letter from the City Health Officer regarding the City Milk Ordinance and the United States Standard Milk Ordinance read before the Society.

Letter from the secretary of the Laurens County Medical Association regarding the curtailment of feeble mindedness read before the Society. The Columbia Medical Society adopted and moved to discuss this at the next business session which notice is to appear on the cards of the next meeting. Dr. F. M. Routh will open the discussion with a five minute talk.

Resolutions upon the death of Dr. James Claud Bonner July 29th, 1950 read before the Society.

Motion moved and passed that copy of resolutions be included in the minutes of the Columbia Medical Society one copy sent to the State Secretary of the South Carolina Medical Association and one to Mrs. Bonner.

The Milk Committee report, vice chairman Dr. Harmon read a brief report from the J. A. M. A. on *Brucella Abortans Infection in Cattle*. The article stated that pasteurization of milk would do away with the dangers of this disease. A copy of this report was sent to the City Health Department and its action is requested by the milk committee.

Clinical pathological conference Dr. Roderick McDonald presented a very interesting case of Infectious Thrombosis of the Cavernous Sinus. Dr. O. B. Mayer discussed the case and Dr. McDonald continued it from a clinical side while Dr. Horger closed the discussion giving the autopsy reports which corroborated the clinical diagnosis of occlusion of the cavernous sinus.

18 members of the society present.

Society adjourned at 9:20.

Respectfully submitted
William Weston, Jr.,
Secretary.

COLUMBIA MEDICAL SOCIETY

Resolutions on the death of Dr. James Claude Bonner, July 29th, 1930

In Dr. Bonner's death the Columbia Medical Society and the South Carolina Tuberculosis Sanatorium has suffered a great loss.

Dr. Bonner was the son of the late W. S. and Missouri C. Bonner. He was born October 6, 1889 in Carroll County, Georgia. His early education was received in the schools of his county completed with his attendance at Bowdon College. His Medical degree was obtained from Atlanta Medical College now Emory University in 1914. After graduation he served his internship at Grady Hospital in Atlanta. For one year he served as Medical Director of Battle Hill Sanatorium in Atlanta—later going to Greenville S. C., as Superintendent of Hopewell Sanatorium where he remained for four years.

Dr. Bonner's most conspicuous service was the ten succeeding years that he spent as Chief Physician of the South Carolina Tuberculosis Sanatorium. He availed himself of every opportunity to enhance his worth in his chosen field. This included a special course in Trudeau Sanatorium at Saranac Lake in 1923, and later, special studies in X-Ray diagnosis of the chest.

In his work painstaking care, and scientific accuracy was outstanding, and greater than this, was his kindness and understanding of his patient's problems.

He endeared himself to everyone at State Park and was loved more deeply than most physicians. From early in life he was an active church worker, and at the time of his death was a member of the Board of Stewards of the Main Street Methodist Church, of Columbia, S. C.

On July 26, 1923, Dr. Bonner was married to Miss

Lila Virginia Long, of Columbia, S. C., who with three children, Virginia James and Mary Elizabeth survive him.

Thos. A. Pitts, M. D.
F. M. Routh, M. D.
Committee

SPARTANBURG COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Spartanburg County Medical Society was held Monday, Nov. 24, 1930 at 8 P. M., at the General Hospital. About thirty members were present.

Dr. E. A. Hines, Jr., and Dr. J. W. White presented a patient with spastic paralysis of both lower extremities. The patient also complained of severe pains in the legs and muscular contracture of both legs. X-Ray films showed a rounded mass about the size of an orange lying just lateral to the 7th thoracic spine. There was also considerable pleural thickening. At operation this mass had been found to extend between the vertebrae and a portion of it about 5 cm. long and 2 cm. wide was found between the bony canal and dura, compressing the spinal cord. This portion of the tumor was removed and when examined pathologically was found to be a tuberculoma.

This case was discussed by Dr. J. Warren White, Dr. Hess, Dr. S. O. Blach and Dr. J. F. Busch.

Dr. F. H. Sanders reported two cases of spider bite poisoning. Dr. Sanders stated that there was probably only one variety of poisonous spider in this section of the country. This spider is usually black with yellow dots on the ventral surface. The bite is often hard to find and the patient complains of nausea and vomiting, general weakness and there are tetanic and occasionally clonic contractions. The abdomen muscles are very rigid and usually the first to be affected. The pulse is rapid and the patient is very sick from one to four days. Morphine and codeine, strychnine and external heat help to alleviate the patient's suffering. Morphine is by far the best drug to use. Convalescent serum is also very useful in prevention and treatment. Additional cases were reported by Dr. J. J. Lindsay and Dr. C. J. Josey.

Dr. H. E. Heinitsh, Jr., reported a case of coronary thrombosis. The patient complained of pain in the epigastrium radiating to the precordium. This patient had several attacks of vomiting which lasted three or four days at a time. There was slight fever after each attack. The entire abdomen was tender. At autopsy the heart was found to be small and showed chronic myocarditis of the coronary vessels and many small grayish white areas in the heart muscles. This case was discussed by Dr. Sparkman and Sanders.

The amendments to raise the dues from \$7.00 to \$10.00 per year and to separate the offices of Secretary and Treasurer and elect a member to each failed to pass. Motions were made to set aside these amendments. The Secretary made a motion to reduce the allowance of the Secretary from \$75.00 to \$55.00 per year. This motion was passed.

Resolutions on the death of Dr. Haynes were read

by the Secretary.

There being no further business the meeting adjourned.

C. W. Bailey, Pres.

W. M. Sheridan, Sec.-Treas.

**PROCEEDINGS OF THE REGULAR MEETING
OF THE MEDICAL SOCIETY OF SOUTH CAROLINA,
HELD AT ROPER HOSPITAL TUESDAY
EVENING, DECEMBER 23RD, 1930, AT 8:30
O'CLOCK**

The meeting was called to order by the President, Dr. J. Sumter Rhame.

Present: Doctors: Boette; Bowers; Buist; Cain; Deas; de Saussure; McCrady; Rhame; Richards; Sams; W. A. Smith. (11)

The minutes of the meeting of December 9th were read, corrected and confirmed.

The Secretary read a letter from Mr. F. O. Bates, Superintendent of Roper Hospital, transmitting a letter from Mr. W. F. Burguson. This letter had been referred to the Medical Society by the Board of Commissioners at its regular meeting on December 22nd.

Charleston, S. C.
December 19, 1930

Mr. Oliver Bates, Supt.,
Roper Hospital
Charleston, S. C.

Dear Mr. Bates:

Those interested in this State in assisting crippled children have agreed upon the need of a division of the present appropriation, which is at present dispensed, I believe, by Dr. Boyd, in securing not only a greater appropriation, but a division of the effort which will in turn assist just that many more needy children.

As you know, the Shriners' Crippled Childrens' Hospital at Greenville does not accept for treatment any child over fourteen. This limit precludes the admission of many needy cases, and I am sure that you will agree with me when I say that we here in Charleston can duplicate the offer of Greenville, where I have been informed Doctors Clegg and White have offered their services free of charge in assisting cases coming under this classification. The money appropriated of course will be used in defraying necessary hospital expenses such as nursing, food, etc., and further that a division of this kind would naturally save considerable money to those vitally interested in the way of time and railroad expense. I trust you will see my point.

I have information that a recent survey was made in the State, and that it was admitted that about four thousand cases needing attention are now without this assistance, and that there is plenty of room for this kind of charity, and my purpose in writing you is to ascertain whether the Roper Hospital would be willing to assist in getting an appropriation for a district comprising of a portion of the eastern section of the State.

It is possible that you have some figures on this effort. If so, I would like them. However, if you are

in accord with a movement of this kind, won't you write to Dr. Hayne on the State Board of Health, suggesting this division, and to what extent the Roper Hospital will go in the movement, and also the amount you think would be needed. John M. Holmes of Greenville has written to Dr. Hayne, and he suggests that I take the matter up with Dr. Robert Wilson, who is Chairman of the State Board. I, however, think that you are the proper man to approach Dr. Wilson on the subject, and to that end I am going to remain in the background, awaiting your conference with him on the subject.

Won't you write me and let me know what you think and what suggestions you have on the matter?

Thanking you, I am

Yours very truly,
W. F. Burguson.

Dr. A. J. Buist explained that the object of this letter of Mr. Burguson's was to interest the Hospital authorities in making an effort to have a portion of the money now appropriated by the State through the State Board of Health for orthopedic work, diverted to the upper and lower sections of the State. Dr. Buist stated that he understood that about fifteen thousand dollars was now being annually appropriated and the work was being done in Columbia. Mr. Burguson of the Shriners and Mr. Holmes of Greenville were anxious to have this appropriation divided so that the Greenville, Charleston and Columbia sections of the State would each get a third, believing that in this way a more equitable division of the service would be obtained. Dr. Buist stated that he did not know what was the best procedure to take in this matter. The Secretary suggested that this be referred to the Committee on Public Health and Legislation for investigation and report. On motion, this was done.

The Secretary also read a letter from Mr. Joseph C. Barbot, Clerk of Council. This letter had been discussed by the Board of Commissioners of the Hospital and on the Chairman's advice had been referred to the Society for its information.

December 20, 1930

Dr. George McF. Mood, Chairman
Roper Hospital Commission
Lucas Street, City,
Dear Doctor:

I am directed by the Mayor to request the Roper Hospital Commission to open at once the Murray Memorial Hospital. The building has been completed, having been delivered by the contractors about three weeks ago with now only about a week of the expiration of their bond for satisfactory performance, making it necessary that the Commission which is to operate the hospital, inspect and take charge of the property for the protection of the executors of the estate that made such a munificent gift to the City of Charleston.

It is also stated that there is a pressing need just at this time for the operation of this much needed equipment of a thoroughly up-to-date contagious hospital, demanding that these facilities be put to public use.

Under date of December 3d, the Executrix and Executor of the estate of Mr. Murray sent an official notification to City Council that the building was completed and ready for actual taking over and possession. In conformity with the request of Mr. J. Waties Waring, Attorney for the Estate, the Clerk of Council forwarded the key of the building to Mr. Bates, Superintendent.

Upon the reading of this communication at the meeting of City Council on the 9th inst., the Mayor remarked that it might be received as information, saying that the Executrix and Executor had been thanked by resolution when the hospital was offered to the City last April, but if it were found that there should be any further action, that this might be left to the Mayor and the Clerk of Council, or if necessary or desirable to a subsequent meeting of City Council.

On motion of Alderman Maybank, seconded by Alderman Doscher, the Mayor's recommendation was adopted.

I am enclosing a copy of the journal for your further information.

Some days ago, Mr. George H. Moffett, representing the Medical Society of South Carolina, Trustees of the Roper Fund, called on the Mayor, explaining that it was desirable before actually taking over and operating the hospital that certain papers should be drawn up. The Mayor informed Mr. Moffett, in the presence of the Clerk of Council that all such detail will be attended, suggesting that Mr. Moffett get into communication with Mr. Legge, Corporation Counsel. Mr. Legge was then in New York on official business. The Mayor authorized Mr. Moffett to have the Roper Hospital Commission proceed with the operation of the new hospital assuring him that the necessary details could be later taken up with the return of Mr. Legge, under the disposition of the matter by City Council.

In the light of the situation as here presented, the Mayor is very desirous that there be no further delay in putting the Murray Memorial Hospital into use immediately.

Yours very truly,
Joseph C. Barbot
Clerk of Council

Copies to Mayor, Mr. Waring, and Mr. Legge.

The Secretary explained that at the meeting of the Board of Commissioners it was decided that the new Murray Memorial Wing would be opened on December 26th for public inspection and on the following day utilized for the care of patients. This was done in compliance with the letter of the Clerk of Council, and the Board was desirous of having the Society endorse its action in this matter. Dr. F. G. Cain, a member of the Board, pointed out that it was to the interest of the Society to have the building passed upon at once, as any defects found in the construction would later on devolve upon the Society, and as the contractors' bond would expire in a short time, it was advisable to open the building at once. It was moved, seconded, and carried that the Medical Society accept the Murray Memorial Wing from City Council and that the action of the Board of Commissioners in

arranging for the opening of this building be confirmed, it being understood that a formal transfer of this unit by the City to the Medical Society would be executed as soon as possible.

There being no further business, the meeting adjourned.

W. Atmar Smith, M. D.
Secretary.

CALL MEETING OF THE GREENVILLE COUNTY MEDICAL SOCIETY, HELD IN THE LECTURE HALL, CITY HOSPITAL, DECEMBER 1st, 1930.

A call-meeting following the regular monthly meeting of the County Medical Society was called to order by the newly elected president, Dr. Irving S. Barksdale, in order to receive the report of the committee investigating school hours.

Their written report was read by Dr. R. M. Pollitzer, chairman. He called attention to considerable study of the question by the committee, also thanking the school authorities for their cooperation. The committee made the following recommendations:

Preamble—

"One of the rights of a child is to an education that will properly develop him in mind and body, while protecting him from contagious diseases and developmental disabilities while in school."

Report—

"Your committee has made as thorough and comprehensive study of the present system as possible within the time allotted. Your committee has had remarkable cooperation from people here, the school authorities, the children and from educators, doctors and parents elsewhere.

We are convinced that the school authorities have at heart the best interests of the children and the citizens. We take this opportunity of thanking Dr. Mann, his Faculty and the Trustees for their sympathetic cooperation.

We believe that the present system, barring some slight changes, is the best for our needs.

There are some parents, doubtless, who find the average expenditure of fifteen to twenty cents a day for a child a burden. The school cannot do more than permit these families to send lunch from home. However, in the future, if possible in the near future, the City should bear the financial burden of providing a free lunch daily to all its High School children just as they provide free books. This has been done for many years in Cities here and abroad.

We recommend:

1. The continuance of the cafeteria system and maintain that the food is wholesome, well prepared and furnished at a very moderate outlay.
2. That sufficient time should be allotted at school for a lunch to be eaten leisurely, and further that the lunch hour be so arranged as to provide, following the meal, twenty to twenty-five minutes out of doors.
3. That a sufficient number of benches be placed in the school yard. We are firmly of the opinion that the children should be out-doors more than at present.

4. That keeping-in after school be discouraged.
5. That the children be dismissed at three instead of three-thirty, if such can be arranged without too great disturbance of the schedule.
6. That no child, unless in splendid health and averaging at least 85%, should be allowed to carry over four hours of class work daily.
7. That unless the health is good and scholastic attainment satisfactory, extra-curricula activities be curtailed.
8. That supervised study be made more effectual in order to further reduce the amount of study at home.

We find that the average high school child is not getting sufficient sleep, for which the school does not seem to us to be responsible. This prompts us to offer the suggestion that the parents, as well as the school authorities, have a responsibility in maintaining the health of the school child.

Respectfully submitted:

R. M. Pollitzer, Chairman
E. W. Carpenter
Hugh Smith.
Committee.

Dec. 1, 1930.

Dr. Sanders moved that the report be adopted and endorsed. Amended by Dr. Guess to send copies of report to two daily news papers, to Dr. Mann, and to the Chairman of the school trustees. The motion and amendment duly seconded.

Considerable discussion was made by Drs. W. S. Fewell, Pollitzer, Bruce, Brockman, Walter Bates, Earle, Davis, Smith, Mauldin, Murray, Fair, Carpenter, Evatt, Grimbail. The question was called and a standing vote showed 24 for and 10 against accepting the recommendations of the committee.

The meeting was then adjourned.

Respectfully submitted,
Jack D. Parker, Sec.

SPARTANBURG COUNTY MEDICAL SOCIETY

The regular meeting of the Spartanburg County Medical Society was held Monday, Dec. 29th, 8 P. M. at the Spartanburg General Hospital. About thirty members were present.

The meeting was called to order by the President, Dr. C. Williams Bailey, and the minutes of the November meeting were read and approved.

Dr. E. A. Hines of Seneca, S. C., Sec. of the South Carolina Medical Association was the invited speaker of the evening. Dr. Hines gave a report of the Conference of the State Secretaries held in Chicago, Nov. 1930. Dr. Hines stated that the Key Note of this meeting was "Economic Medicine." Dr. Hines reported an interesting contract between the County Supervisors and some of the County Medical Societies in Iowa. From \$1600.00 to \$12,000.00 is turned over to each Society to be distributed equally among its members each year. New York State also has a welfare board which compensates the doctors for taking care of the indigent poor.

A questionnaire sent to 1500 doctors in West Virginia showed that the average net income of each doctor in that state was \$6000.00 per year. The Net Income of the surgeons was \$9000.00 per year and the dermatologists was \$9800.00 and the average net income of the X-Ray specialists was \$4000.00 per year. Seventy-nine per cent of the accounts were collected and the medical profession of West Virginia loses four and a half million dollars on charity patients and bad accounts. The average cost per person for medical care is 18 cents per year.

Dr. Hines warned of the dangers of the passage of an Anti Vivisection bill, which prohibits experimenting on live dogs in the District of Columbia. He stated that this was but an entering wedge in an attempt to introduce Anti Vivisection bills covering the entire U. S. Dr. Hines' interesting and instructive talk was greatly enjoyed by the Spartanburg County Medical Society.

The Secretary read a letter from Dr. R. L. Martin, Sec. of the Laurens County Medical Society requesting the members to consider the advisability of supporting a bill, which will be introduced at the next meeting of the State Legislature, legalizing the sterilization of feeble minded persons. Dr. B. O. Whitten, Superintendent of the State Training School for Feeble Minded stated in a recent talk before the Laurens County Medical Society that four hundred thousand mentally deteriorated patients were treated in State institutions in the United States which necessitated the expenditure of one hundred million dollars annually. This does not include mentally deteriorated persons who were treated at private institutions. Dr. Whitten emphasized the value of eugenic sterilization in reducing the number of mentally deteriorated persons who are dependent upon the States. Twenty-four States already have laws allowing eugenic sterilization and Dr. Whitten emphasized the need of such a law in South Carolina to reduce the number of feeble minded persons cared for by State Institutions.

Dr. D. Herbert Smith moved that the Spartanburg County Medical Society go on record as favoring Sterilization of mentally unfit. This motion was seconded and carried.

The society entered into the election of officers for the year 1931.

Dr. H. E. Heintish Jr., was unanimously elected President and Dr. J. T. Carter was unanimously elected Vice-President. Dr. W. M. Sheridan was re-elected Sec.-Treas. Dr. W. B. Lyles was elected delegate to the State Medical Association. Dr. A. R. Fike, Dr. F. H. Sanders and Dr. W. W. Boyd were re-elected alternate delegates. Dr. F. H. Sanders was re-elected to the Board of Censors for a three year term. Dr. Geo. Thompson was elected to the Board of Censors for a year's term.

The retiring President, Dr. C. W. Bailey, thanked the members of the Society for their support and interest during the past year and turned over the chair to Dr. H. E. Heintish, Jr., who expressed his appreciation in being elected President for 1931.

Having no further business the meeting adjourned.

C. W. Bailey, Pres.

W. M. Sheridan, Sec.-Treas.

**PROCEEDINGS OF THE ANNUAL MEETING OF
THE MEDICAL SOCIETY OF SOUTH CAROLINA,
HELD AT FORT SUMTER HOTEL, TUESDAY
EVENING DECEMBER 9th, AT 8:30 O'CLOCK**

The meeting was called to order by the President, Dr. J. Sumter Rhame, in the dining pavilion of the hotel.

President:

Doctors: A. E. Baker, Jr.; B. R. Baker; Ball; Banov; Barnwell; Beach; Beckman; Boette; Bowers; Burn; Byrnes; Cain; Cannon; Chamberlain; Deas de Saussure; Finger; Frampton; Gantt; Heidt; Hope; Jenkins; F. B. Johnson; W. H. Johnson; LaRoche; Lynch; McCrady; McInnes; Maguire; Martin; Mitchell; Mood; Moore; O'Driscoll; Palmer; F. L. Parker; Pearlstine; Pettus; Phillips; Prentiss; F. R. Price; Prioleau; Ravenel; Rhame; R. B. Rhett; W. M. Rhett; Richards; Rutledge; Sams; Sanders; Scharlock; Scott; J. E. Smith; W. A. Smith; Wh. H. Speissegger; Sugrue; Taft; Taylor; Townsend; Waring; Whaley; Wild; I. R. Wilson, Jr.; L. A. Wilson; Robert Wilson; Zebst. (67)

Guests: Dr. K. M. Lynch, President of South Carolina Medical Association; Dr. E. A. Hines, Secretary of South Carolina Medical Association; Dr. C. P. Ryan, Vice President, First District Medical Society; Dr. L. L. Williams, of North Carolina; Captain J. F. Murphy, Lieutenant Commanders A. E. Beddo, Horace V. Cornett, H. M. Stenhouse and Stevens, of the U. S. Navy; Major E. Blackshear and Major Robert Malcolm of the U. S. Army; Dr. Roe E. Remington; Dr. P. M. Huggins; Dr. E. C. Hood; Dr. I. M. Hinant, Chief of Staff, Roper Hospital; and Mr. J. M. Hicks, President of the Student Body of the Medical College.

Dr. Edward Rutledge stated that the Ex-Presidents had prepared a punch and he desired to present this to the Society in behalf of his fellow Ex-Presidents. The members of the Society immediately expressed their appreciation of this generous gift by at once participating.

Dr. K. M. Lynch requested that the President recognize him out of order, as he had desired to submit a resolution which should be acted upon at once. It was recognized by the Chair and Dr. Lynch stated that he felt that all the members of the Society deeply regretted the absence of Dr. Charles W. Kollock, a Past President of this Society, who was absent on account of illness. He stated that Dr. Kollock had never missed an Annual Meeting prior to this and he submitted the following resolution:

RESOLVED that the Medical Society of South Carolina in its 141st Annual Meeting and Banquet assembled, deeply regrets the enforced absence of its beloved member and Past-President, Dr. C. W. Kollock, and delegates a committee to call in person upon Dr. Kollock and present a bouquet of flowers, carrying the esteem and affection of the Society on

this the 35rd anniversary of his election to the President. This was seconded and adopted by standing vote. The Chair then appointed Dr. H. W. de Saussure, Vice-President, Dr. Edward Rutledge and Dr. K. M. Lynch to convey these sentiments to Dr. Kollock and to carry him the bouquet of flowers which had been secured for this purpose by the Secretary.

The minutes of the meeting of November 25th were read and confirmed.

The Secretary presented the application of Dr. P. M. Huggins for membership in the Society, accompanied by initiation fee, and properly endorsed. This was referred to the Board of Censors.

Dr. J. H. Cannon reported that the matter of Doctors Black and Brown joining this Society had been referred to him as Councillor, and on looking into the subject he felt that they were not eligible for membership in this Society. This opinion was concurred in by Dr. E. A. Hines, the Secretary of the State Medical Association. Dr. Cannon, however, suggested that the Secretary be instructed to place these gentlemen on the mailing list in order that they might attend such meetings of the Society as they desired. The Secretary was directed by the President to write to these gentlemen and convey this information to them.

Under Miscellaneous Business, the Secretary brought to the attention of the Society that through an error at the last meeting, no nomination had been made for a member of the Board of Censors, to fill the vacancy created by the termination of Dr. O. B. Chamberlain's term. He then nominated Dr. Chamberlain to succeed himself.

Election of officers was then taken up. The following were elected unanimously:

Secretary	Dr. W. Atmar Smith
Treasurer	Dr. J. H. Cannon
Librarian	Dr. W. C. O'Driscoll
Commissioner of Roper Hospital (five years)	
.....	Dr. G. McF. Mood
Member of Board of Censors (three years)	
.....	Dr. O. B. Chamberlain
Delegate to State Association (five years)	
.....	Dr. T. E. Bowers
Alternates to State Medical Association (one year)	
Dr. J. W. Burn, Dr. J. E. Smith; Dr. J. J. Ravenel;	
Dr. W. H. Prioleau; Dr. R. L. McCrady.	

Dr. James Frampton and Dr. W. H. Johnson were elected Honorary Fellows.

At the close of the Business Meeting, the Society adjourned to the Banquet Hall, for the Annual Banquet.

The speakers for this occasion were Dr. Kenneth M. Lynch, President, and Dr. Edgar A. Hines, Secretary of the South Carolina Medical Association.

At the conclusion of the Banquet, the meeting adjourned.

W. Atmar Smith
Secretary

MARLBORO COUNTY MEDICAL SOCIETY
Annual New Year's Meeting and Banquet
PROGRAM

From 3:00 to 4:45 P. M., Reception was held at the Marlboro County General Hospital—the first Duke Endowment Hospital to be opened in South Carolina.

1. Public Medicine versus Private Practice—Dr. Kenneth M. Lynch, President S. C. Medical Association, Charleston, S. C.

2. Report of Progress in Medical Economics—Dr. E. A. Hines, Secretary S. C. Medical Association, Seneca S. C.

3. Viosterol and Cod Liver Oil in the Treatment of Rickets—Dr. J. Buren Sidbury, Wilmington, N. C. Discussion opened by Dr. J. T. Price, Florence, S. C.

4. Medical Cases—Dr. J. H. Cannon, Charleston, Charleston, S. C.

Dinner in the Banquet Hall.

5. The injection Treatment of Hemorrhoids—Dr. Thomas Brockman, Greer, S. C.

Mullins: Drs. F. L. Martin, R. B. Stith.

Hartsville: Dr. William Egleston.

Marion: Drs. E. M. Dibble, B. M. Montgomery,

Z. G. Smith, J. C. Moore, Jr.

Johnsonville: Dr. A. G. Eaddy.

Nichols: Dr. H. B. Webb.

Kingtree: Dr. E. T. Kelley.

Society Hill: Dr. W. A. Carrigan.

Discussion opened by Dr. Frank M. Durham, Columbia, S. C.

6. The Adult Types of Diarrhea—Dr. Hugh Smith, Greenville, S. C.

Discussion opened by Dr. Walter R. Mead, Florence, S. C.

7. The Thyroid Heart—Dr. Stewart R. Roberts Atlanta, Ga.

Discussion opened by Dr. J. H. Cannon, Charleston, S. C., and A. G. Brinizer, Charlotte, N. C.

The following physicians registered at the meeting:

NORTH CAROLINA

Charlotte: Doctors O. L. Miller, D. H. Nisbet, J. R. Shull, J. M. Northington, R. W. McKay, H. L. Sloan, S. W. Davis, A. G. Brenizer, Oren Moore, H. W. McKay, A. A. Barron.

Fayetteville: Doctors Wade Parker, R. L. Pittman.

Bladenboro: Doctor D. H. Bridger.

Monroe: Doctors A. F. Mahoney, R. D. Pearson, W. M. Love, R. H. Garren.

Albemarle: Doctors J. S. Gaskin, V. L. Bigler.

Raleigh: Dr. Bessie Lane.

Hamlet: Doctors W. D. James, M. A. Hatcher.

Gisbon: Doctors J. S. Gibson, J. G. Pate, E. A. Livingston.

Laurinburg: Doctors E. A. Erwin, N. C. Hunter, F. P. James, Peter McLean, Peter John.

Laurel Hill: Dr. M. B. Wilkes.

Fort Bragg: Majors J. A. Johnson, B. S. Burnet.

Rockingham: Doctors A. C. Everett, C. O. Bristow, J. M. Ledbetter.

Wilmington: Dr. J. Buren Sicbury.

SOUTH CAROLINA

Bennettsville: Drs. William Evans, Jr., Douglas Jennings, P. M. Kinney, L. R. Kirkpatrick, C. R. May, T. H. Smith, D. D. Strauss.

Clio: Drs. L. P. Barnes, J. A. Hamer.

Blenheim: Dr. C. D. Napier.

McColl: Dr. J. C. Moore, Sr.

Cheraw: Drs. R. J. Coney, I. S. Funderburk, C. L. Guyton, Jr., O. H. Davis.

Chesterfield: Dr. R. L. Gardner.

Darlington: Dr. C. C. Hill.

Bishopville: Dr. N. Y. Alford.

Florence: Drs. M. R. Mobley, S. R. Lucas, F. H. McLeod, J. P. Price, J. G. McMaster, L. J. Ravenel, J. T. Howell, L. B. Salters, W. R. Mead, O. T. Finklea, J. W. Lipscomb.

Charleston: Drs. J. H. Cannon, K. M. Lynch, J. C. Mitchell, J. F. Townsend.

Dillon: Drs. S. C. Henslee, D. M. Michaux, Gerald McDaniel.

Seneca: Dr. E. A. Hines.

Summerton: Dr. W. H. Carrigan.

Greer: Drs. T. A. Brockman, Sylvester Cain, Jr.

Columbia: Drs. Walter Bristow, J. H. Taylor, F. M. Durham, J. A. Hayne, R. G. Hamilton, P. V. Mikell, T. A. Pitts, L. E. Madden.

Ruby: Dr. R. M. Newsom.

Greenville: Dr. Hugh Smith.

Conway: Dr. D. W. Green.

Sumter: Drs. C. B. Epps, T. R. Littlejohn, Milton Weinburg, H. L. Shaw.

Lancaster: Dr. E. B. Michaux.

GEORGIA

Atlanta: Dr. Stewart R. Roberts.

Dr. D. D. Strauss, Sec.
 Bennettsville, S. C.

COLUMBIA MEDICAL SOCIETY

Medical Society Hall, Monday, January 12, 1931. Meeting called to order by the president, Dr. James S. Fouche at 8:30 P. M.

Minutes of last regular scientific meeting read and adopted.

Under clinical case reports.

Dr. J. Heyward Gibbes presented a case of wild mallard duck which skeletal muscle showed many parasites. Section under microscope of this parasite was shown.

The guest speaker of the evening was Dr. Gabriel Tucker of the University of Pennsylvania whose subject was Pehoral Endoscopy in the Diagnosis and Treatment of Diseases with special reference to Diseases of the Lungs. His talk was illustrated with lantern slides and a moving picture reel. His discussion was enthusiastically received by those present. By his request Dr. Percy Hay of Florence discussed the subject from an X-Ray standpoint of the soft tissues in the neck. Dr. Tucker closed the discussion by stating that they never did any instrumentation without first having the patient X-Rayed.

There were 45 members of the society present and 15 visitors.

Motion for adjournment at 10:30 P. M.

Respectfully submitted,
William Weston, Jr.,
Secretary.

NEWS ITEMS

Dr. Eugene Zemp of Columbia has returned from a four months stay in Europe where he visited various clinics in Internal Medicine.

Dr. T. G. Hall of Westminster has been appointed Director of the Health Unit of Oconee County.

SITUATIONS WANTED

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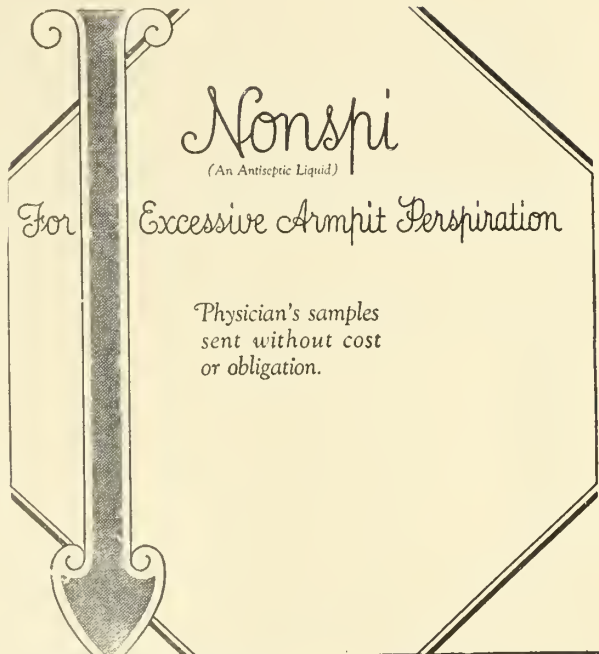
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EDITORIAL

HISTORIC GAVEL PRESENTED TO ANDERSON COUNTY MEDICAL SOCIETY

It was the pleasure of the Editor to attend a most interesting meeting of the Anderson County Medical Society, February 11, and to note the keen interest displayed by the President-Elect, Dr. Frank Lander of Williamston in historic matters. It appears that since the wonderful campaign of the Woman's Auxiliary cooperating with the State Medical Society and culminating in the erection of the beautiful memorial to J. Marion Sims on the State House grounds in Columbia there has been a marked interest in various parts of the State in regard to the preservation of historic facts about the medical men of South Carolina. Quite a number of important papers have appeared in our own Journal along this line and some contributions of unusual interest published in Journals of national circulation. One of these appears in Annals of Medical History, January, 1931, by Dr. Robert E.

Seibels of Columbia, commenting on the life and activities of Dr. Thomas Dale of Charleston, South Carolina, who lived there from 1725 to 1750, a distinguished writer and eminent practitioner. Recently Dr. J. I. Waring of Charleston contributed a most important article in the same great Journal on the life and works of another pioneer Charleston physician. We wish to commend this evidence on the part of the members of the State Medical Association in that we are not willing to forget those who have blazed the way for our advancement. It is highly probable that as a result of the keen appreciation of the importance of the matter that some action will be taken by the House of Delegates at the Greenville meeting in regard to a definite plan for the preservation of the great record made by South Carolina doctors. The contribution made by Dr. Lander is worthy of emulation by other County Societies and we are publishing herewith his remarks on the occasion alluded to above:

Gentlemen of the Society:

I pray your kind indulgence for a few moments while I relate a bit of local history. Ninety-eight years ago, this month, or to be more exact, on February 4th, 1833, the first boy was born in Anderson. He was the son of Mr. and Mrs. Daniel Brown. His parents named him Benjamin Franklin Brown. He was educated in the local schools and at the classical academy at Williamston. He studied medicine in Charleston and graduated in 1854. He returned to Anderson to live and married Miss Sallie Patterson Wideman. He served with honor in the Civil War as surgeon with the rank of Major in Longstreet's corps. After the war he lived in Williamston where his professional attainments and his splendid citizenship en-

deared him to all our people until his death in May 1919.

I loved him as sincerely as I now revere his memory. I have been fortunate enough to obtain a piece of wood from one of the chairs with which this master of medicine started housekeeping in 1856. From this I have had made in his son's shop a gavel for our use. I have peculiar pleasure in presenting this emblem of authority to your honorable body with the hope that as we study modern medical methods we may not lose the vision of the wonderful work of our fathers in the healing art.

Benjamin Franklin Brown, M. D.
Anderson, S. C., 1833
Williamston, S. C., 1919

PRESIDENT'S PAGE

BY KENNETH LYNCH, Charleston, S. C.

THE AIMS AND OBLIGATION OF ORGANIZED MEDICINE. V.

Progress in Medical Practice.

Reviewing the several outstanding stages in the evolution of the professional life of physicians who make the journey of regular and reputable medicine, and with apologies to the Bard of Avon, one may set up a sort of "seven ages of medical man."

1. The Student, the initiate into the mysteries of the wisdom and the ideals of the Profession.
2. The Diplomat, self-important in his pinfeathers and surprised to learn that he is not yet to be entrusted with the lives and happiness of other people.
3. The Assistant, the apprentice, chafing under the restraint of his superiors and anxious to be "on his own."
4. The Young Independent, whose "student" days are over, whose self-sufficiency is all-encompassing.
5. The Agnostic, disillusioned of the infallibility of his own knowledge and of that of "authority," occupying that difficult ground between the self-sufficiency of inexperienced youth on the one hand and of professional maturity on the other.
6. The Mature Doctor, established in his clientele, rich in experience and judgment, whose own good sense and rightful associations have brought him to the stage of commanding the respect of his colleagues and fellow citizens.
7. The Old Timer, dignified in his position, apt to be crystallized in his opinions and garrulous in his discussions, the philosopher, whose accumulated knowledge and experiences might lead him in paths to the discovery of the unknown were he not already entering into decay.

Progress in the practice of medicine during the supervised stages is largely a matter of praeceptorial guidance. When the practitioner enters upon the independent age, however, further progress is a matter entirely within the control of the individual. When one has escaped from apprenticeship there is more or less rebellion against study. Fortunately this is usually a temporary frame of mind and soon one comes back to the realization that progress must rest on unceasing study. Naturally this is accomplished more readily in or near what we call medical centers, but even where opportunity is good there are few who will continue self-education without constant self-spurring.

In the lives of most physicians the incentive to study is dulled by lack of inspiring professional fellowship and by the easy or lazy habits produced by routine. For the assistance of practitioners in keeping abreast of progress organized medicine and centers of education have devised numerous schemes, usually in the form of post-graduate review courses or medical gatherings of a variety. Review courses for general practitioners usually have an initial success and eventual failure. They fail because the strength of purpose of both parties concerned is insufficient for successful sustained effort against natural difficulties. As a matter of fact what one obtains from such courses is largely in the form of stimulation and not so much utilitarian. In the place of such courses it would be a splendid thing if teaching centers could be prepared to rejuvenate professional enthusiasm in a way which would be more practically administered and more conveniently available to general practitioners.

It is one of the major objectives of organized medicine to keep ever before the attention of practicing physicians the necessity of frequent participations in medical gatherings of many kinds, of reading, both of books and medical magazines, and of periodic visits to educational centers. Sitting in the seat of a student is productive of humility and inspiring to ambition, both of which are good for the ego. Otherwise it is very progress in one's own practice to stop, and it never stands still.

Without continuous stimulation the practice of medicine is apt to become hack-work, or worse. Physicians who fall out of the line of progressive medicine or whose armamentarium is outworn are those who fail to continue their studies and who gravitate to the fringes or entirely outside organized medicine.

ORIGINAL ARTICLES

*THE ADULT TYPES OF DIARRHEA

By Hugh Smith, M. D., Greenville, S. C.

From time to time patients present themselves to each of us complaining of diarrhea. Many of these cases are chronic and the differential diagnosis becomes important. The acute diarrheas due to food, chemical or bacterial poisoning are usually evident and will not be included in this paper. It is not my thought to detail a list of differential clinical points, but rather to emphasize the fact that symptomatic diagnosis is commonly faulty, and to review the simple methods which usually suffice to make an accurate diagnosis.

In discussing diarrheas, we can divide them roughly into two groups; those which have a painless diarrhea with loose stools of undigested foods and with putrefactive or fermentative changes on the one hand; and those which show blood, pus, and mucus, usually with pain on the other. Illustrating the first group are Sprue, Pellagra, Primary Anæmia, Gastrogenic and Neurogenic diarrheas. In the second group are such conditions as Amœbic dysentery, Chronic Ulcerative Colitis, Malignant and Simple Ulcers of the Colon and Rectum.

Certainly 'hind sight is better than fore-sight' in these cases. Dr. Brockman has ably convinced us of this fact. The old adage to "Always look down their throats and up their rectums" is especially pertinent in treating Diarrhea.

Before discussing the various types, a brief review of the simple armamentarium required and the methods used in studying the cases seems worth while. Of prime importance is an examination of the stool itself. This may sound pert, but I know that it is not always done. The eye and the nose will tell you much about the type of diarrhea. Color, odor, blood, pus, mucus, and even at times

parasites are recognized. Then by introducing the index finger into the rectum, you gain other information as to sphincter tone, the presence of external hemorrhoids and the size and contour of the rectal ampulla. Having inspected the specimen of stool, a bit of it is mixed with normal salt until a fluid consistency results. Part of this should be examined directly under the microscope, for ova, amœba, blood and pus. If a few drops of 30% acetic acid is added to a small bit of the emulsion and gently warmed before placing under the scope any excess of fatty acid crystals is immediately apparent. To another bit of the emulsion a few drops of Iodine are added and again the microscope shows clearly any excess of undigested starch cells. The reaction of the stool is of some interest. Normally, it is about neutral, but in the presence of excessive putrefactions it becomes quite alkaline and if there is an excessive fermentation it is acid.

In recent years there has been some tendency to discredit the stomach tube. Perhaps this is due to the easy reference of patients for gastro-intestinal X-ray studies. I grant you that the exact titre of the stomach contents is of no great significance, but knowing whether your patient has a total lack of HCL or a hyperacidity is of real value in the satisfactory treatment of their digestive complaints. So far, I have mentioned the eyes, nose, index finger, stomach tube, and a microscope as the needed equipment. One other instrument is essential in the investigation of these cases. A proctoscope, lighted by a small battery, is one of the most satisfactory 25 dollar investments I know. Its use requires no particular training and offers no technical difficulties. Its upkeep is negligible and except for the lamps and batteries there is no particular depreciation. Any patient with griping pains, blood, or pus in his stools should have a proctoscopic examination. In this manner the tragic mistake of calling an early malignant growth internal hemorrhoids can be prevented, and other causes, such as polyps,

*Read before the Marlboro County Medical Society, January 7, 1931, Bennettsville, S. C.

ulcers, and amœbic infestations can be more readily recognized. Buie has stated that a large proportion of rectal cancers coming to the Mayo Clinic are sent with a diagnosis of internal hemorrhoids. Only too often such mistakes have occurred in my own experience, and I have been able to make the correct diagnosis only by routinely introducing a proctoscope in every such case. While not used so often, it is about as important in its field as the stethoscope in your general work.

The diarrhea of achylia is fairly common and occurs most often in white patients above the age of forty. The diarrhea is due to the too rapid emptying of the stomach and to incomplete gastric digestion in the absence of HCL. This results in a hypermotility through the entire gastro-intestinal tract and therefrom the occurrence of the loose, mushy, fairly large stools, usually two to six, during the morning hours. There is ordinarily a history of other such attacks with alternating periods of constipation. The diagnosis of this type is made by ruling out other possible causes, especially pernicious anemia and by determining the lack of hydrochloric acid in the stomach contents. The therapeutic response to dilute HCL, one dram with each meal is usually prompt and pleasing.

Mucus colitis is a fairly frequent type of diarrhea. It ordinarily occurs in the hypersensitive, apprehensive individual presenting many evidences of a psychoneurosis. The usual history is one of severe constipation with an abuse of laxatives preceding the recurrent attacks of mucus diarrhea. There will be several stools each day passed with very little difficulty and consisting largely of mucus, either in shreds, masses, or even casts of the bowel. By proctoscopic examination more serious conditions are ruled out. Gastric analysis is usually within normal limits. The treatment is difficult because of the profound psychoneurosis so often associated with it. A smooth type of diet, psychotherapy, sedatives, such as one of the barbituric acid group, and antispasmodics offer the best results. Because of the neurotic element a permanent cure is exceedingly difficult.

The diarrhea of sprue, pellagra and pernicious anemia might be grouped together. The differential diagnosis depends, of course,

on accurate clinical diagnosis. E. J. Wood thought these conditions closely related, and that nutrition deficiencies plus and infestation of the Monilia Psilosis caused them. A great many men now agree that sprue and pernicious anemia are closely related in some little known manner. Musser, of Tulane, says, "We cannot afford to scoff at the idea that the two diseases have the same genesis."

Symptomatically there are several points in common. Weakness stomatitis, dyspepsia, anemia, and diarrhea are seen in all three diseases. Pellagra, of course presents its classic dermatitis and more nervous changes, and the stools are quite different from those of sprue. In pernicious anemia the diarrhea is more variable, achylia is constantly found, and ordinarily the subcutaneous fat is well preserved. The characteristic blood picture will establish the diagnosis. Sprue presents, in addition to the stomatitis, a rather characteristic diarrhea. The stools are exceedingly foul, quite bulky, and of a grayish, foamy consistency. Loss of weight is quite rapid and there is no dermatitis. The anemia, in severe cases, approximates that of a pernicious type, and when you find an associated achylia the differential diagnosis between sprue and primary anemia is often quite difficult. The characteristic sprue stool and the demonstration of Monilia Psilosis will ordinarily establish a diagnosis.

The treatment of sprue, pellagra, and primary anemia is largely a nutritional one. Diets rich in proteins, vitamins, and minerals, especially muscle meats, fruits, dairy products, and vegetables, are essential. In sprue such fruits as strawberries, bananas, pears, and grapes are very useful. Climatic changes during the hot months often prove beneficial. The therapeutic response to liver extract in pernicious anemia is well known. Some observers have reported its use with benefit in sprue.

In pellagra the same general diet, rich in proteins and vitamins, is indicated. Therapeutically Brewers yeast has proven its value. Whether or not it contains an essential P-P vitamin is open to doubt. It is my custom to use Neo-Arsphenimine intravenously in pellagra, and I am sure that it is useful. The

arsenicals are generally contra-indicated, by most authorities, in sprue.

In contrast with these types of diarrhea, we have another group due to local pathology in the colon and rectum. These cases present a painful diarrhea and commonly blood, pus, and mucus in the stools.

Amœbic dysentery presents a painful, gripping, bloody, mucoid stool which in itself suggests a search for the pathologic amœba. Here the proctoscope is of great value. The bowel presents a congested, edematous, inflamed appearance with multiple ulcers of varying size and irregular contour. It is a simple matter usually to demonstrate the amœba in specimens obtained during the proctoscopic examination. In treating amœbic diarrheas successfully, I have found hospitalization necessary. By putting such patients to bed and giving a liquid diet, while keeping hot applications to the abdomen, you can usually promptly control the acute symptoms. Emetin HCL, hypodermically, $\frac{1}{2}$ grain t. i. d. for four days, and then b. d. for three days, a total of nine grains, is very effective. At the same time the colon should be irrigated daily with quinine solutions beginning one to 5,000 and gradually increasing this to one to 2,000. After a week of this treatment the patient is comfortable and is allowed out of bed. The diet is increased by soft and smooth foods. Stovarsol is then given, one tablet t. i. d. for eight days. After this all therapy is stopped for one week, and then a second course of Stovarsol is given.

Chronic Ulcerative Colitis is now generally accepted as a clinical entity, and is believed due to a specific organism, the diplococcus of Bargen, named in honor of the man who a few years ago established its etiological significance. Clinically and symptomatically it simulates amœbic dysentery. The patients have had other attacks with more or less pain, blood and mucus which have spontaneously subsided. During the acute exacerbation proctoscopic examination shows an intensely inflamed, edematous mucous membrane which bleeds on the slightest trauma. Scattered diffusely are small miliary abscesses and discrete, superficial, punctate ulcers. Scattered about are also pock like scars where old ulcers have healed. Buie states that this is a pathog-

nomonic picture. The diplococcus of Bargen is readily cultured by direct inoculation from one of the ulcers. Fortunately it is rather uncommon in my experience.

As an illustrative case of chronic ulcerative colitis, I saw three years ago the young wife of a colleague who was suffering with severe, painful diarrhea, passing blood and mucus, and running a low grade temperature. Except for anemia, the physical and radiographic examinations were negative. Proctoscopic examination showed the typical picture described above and the specific organism was demonstrated. Her condition became progressively worse, resisting all treatment. Transfusions, various topical applications, diet control, and finally a specific vaccine, supplied very kindly by Dr. Bargen, failed to bring about improvement. Death resulted after about ten weeks from peritonitis due to perforation of one or more of the ulcers. Ileostomy was considered in this case, but was condemned by one or two consultants. On proctoscopic examination such conditions as ulcers, either specific or malignant, broken down polyps and rectal strictures are visualized. Having seen the lesion, its recognition is usually simple, and, of course, the bloody, mucoid diarrhea is at once explained.

Two interesting cases have occurred in my experience within the past few years which were rather unusual as to the cause of the diarrhea. One of these was a young man who had been on the Mexican border and in France in the American army. He had a severe, painful, bloody dysentery with ten to twelve stools a day, which had recurred a number of times over a period of four or five years. He had been admitted to several government hospitals and treated for amœbic dysentery. Only one physician claimed to have found the amœba hystolitica. When I first saw him, during one of these acute attacks, repeated search for amœba was negative and proctoscopic examination showed no ulceration and only a congested colon. During his investigation a duodenal drainage was done and myriads of lamblia intestinalis were found in the duodenal contents. It was assumed that the lamblia was the cause of his diarrhea and he was given, Neo-Arsphenamine, which very promptly controlled his symptoms. Seven

years have passed, and there has been no recurrence of his diarrhea. A subsequent duodenal drainage was done and no lamblia found. While the lamblia intestinalis is not ordinarily considered pathologic, from time to time such cases as this have been reported.

The other case was a white man, about forty-five, who had a gastro-enterostomy done ten years before for relief of a duodenal ulcer. Two or three years after the operation he developed recurrent ulcer symptoms, and later the symptoms were associated with rather severe pain in the left upper abdomen. At this point I saw him, and advised operative interference for excision of a peptic ulcer in the margin of his gastroenterostomy. This was refused at the time, but several months later he returned very much emaciated and with an intractable diarrhea, stating that foods eaten were passed unchanged within thirty minutes, by bowel, and that he eructated fecal contents from time to time. X-ray

study confirmed the clinical diagnosis of a gastrocolic fistula. He was operated, and the colon found densely adherent to the gastroenterostomy and that a peptic ulcer had perforated into the colon at this point. The colon was freed, its perforation closed, the gastroenterostomy enlarged and closed with very good results. For a year he was quite comfortable, though he is now having again symptoms of another ulcer, and a few months ago was in bed several days after a gastric hemorrhage.

In conclusion, I have attempted to sketchily review a few of the more common types of adult diarrhea. I have brought nothing new, but only hope to remind you that with an intelligent use of the eye, nose, finger, and three simple pieces of equipment, the stomach tube, the microscope, and the proctoscope, we can accurately diagnose the great majority of these conditions.

*TREATMENT OF PULMONARY TUBERCULOSIS

By Ernest Cooper, M. D., South Carolina Sanatorium, State Park, S. C.

Almost ten decades have come and gone since William Bodington, an English physician in 1833 introduced the dietetic-hygienic treatment of tuberculosis. No other method has proved so satisfactory, although the quest for a cure is as old as history. Many remedies have been tried and found wanting. Rest, fresh air, and good food remain as the accepted basis for treatment. With the passing of the years general systemic rest has come to be the greatest of the trio and is now regarded as the foundation of successful treatment. Experience has shown that tuberculous lungs heal best when at rest. Bed rest decreases the energy requirements of the whole body and lessens the activity of the lungs.

In applying rest and its antithesis—exercise in the treatment of tuberculosis they must be prescribed as if drugs, according to the needs of each patient and according to the stage of

his disease. In the early stages of the disease most patients are able to take sufficient exercise to keep their muscles and general bodily functions in good order without harm to themselves, but in the later stages this is not true. Tuberculosis produces certain effects through toxins, elaborated by the tubercle bacillus, and poured into the blood stream and by it carried throughout the body, affecting the nervous system, and every important bodily function. The respiratory, circulatory and digestive systems are all disturbed; the muscular system loses tone and the heat regulating system is rendered unstable. The instability of the thermal center is manifest early and continues throughout the course of the disease. It is shown by a febrile response to exercise (a test for early diagnosis) that would not affect a well person, and in later stages by a more pronounced rise of temperature which may continue several days.

In prescribing exercise or rest we must consider the condition of the patient's heart, his ability to exercise without fatigue, or dyspnea; the effect upon cough, temperature, sputum, hemoptysis and weight. Exercise should be assigned so as to have no untoward effect upon the patient in these respects.

*Read before the South Carolina Medical Association, May 8, 1930. Florence. S. C.

Exercise, without complications arising, is beneficial. It strengthens the muscles, quickens the flow of blood and lymph, improves nutrition and indirectly favorably influences bodily functions. If exercise is *carried to the point of fatigue* or strain harm is done, the vital forces are depressed, the patient's resistance is lowered, and energy that should be used in combating disease is required to overcome fatigue. The fatigue line must not be crossed. Only the patient can prevent that misfortune.

Exercise may cause shortness of breath. If it is of cardiac origin and the heart is not seriously diseased and other complications are not present, graduated exercises, adapted carefully to the powers of the heart may improve its tone and strengthen its force, thus removing the dyspnea. If the respiratory embarrassment be of pulmonary origin, due to lack of lung tissue, exercise must be carefully restricted for exertion demands more oxygen and so increases the shortness of breath.

The heart requires careful consideration in prescribing exercise. It is the organ most affected and the one that bears the brunt of tuberculosis. It is the most important organ, prognostically. One of the early signs of tuberculosis is a rapid unstable pulse. While at rest, the pulse may seem normal, but upon exertion it is markedly and unduly accelerated and this condition usually holds throughout the disease. In health the pulmonary and systemic circulations balance each other and the heart works without strain. In pulmonary tuberculosis an inflammatory process is present which mechanically impedes circulation and increases the work of the right heart. At the same time the heart suffers from the degeneration due to toxins and general muscular atrophy, as well as from the interference with its nervous mechanism through the binding down of the vagus by adhesions and the presence of masses of enlarged lymph glands. Hence the importance of prolonged rest early in the course of the malady. It is of more worth in the treatment of tuberculosis than most preparations of the pharmacopeia and is a potent medicine when properly administered. It is a tonic for the tuberculous. It restores appetite, reduces fever, tones the nervous sys-

tem, slows the pulse, lessens physiological needs, reduces toxemia, prevents fatigue, cures tuberculosis.

Under certain conditions some coughing is necessary, though it is unnatural and harmful exercise. Cough is a form of pulmonary gymnastics, which is subject to control. "The worst thing for a cough is to cough." Violent coughing means deep inspirations, great increase of intrapulmonary pressure and consequent stretching of the air vesicles, just what happens in deep breathing exercises. Singing, much talking, loud talking, public speaking and violent exercise have much the same effect as coughing. There is evidence that hard coughing is a factor in disseminating infection through the lungs, causing it to spread to healthy tissue and other organs.

It is a little less than amazing how a conscientious "curetaker," by mere will power, can lessen his cough. Many patients think sputum should be raised by coughing as soon as they are conscious of its presence in the air passages. This is an error. The impulse to cough should be repressed if possible. When sputum is first secreted, it is tough, tenacious and difficult to dislodge, but soon it will become more fluid, less tenacious and may be raised with a minimum of effort. The more persistently cough is repressed the more quickly does the desire to cough disappear and the more rapidly is the quantity of sputum lessened; temperature is lowered and pulse is slowed for the toxemia is less.

All febrile patients should be given complete bed rest for two weeks or longer after their temperature becomes normal. Even chronic cases, many times, but not always, are benefited by a prolonged stay in bed.

Consumptives react to mental and emotional stimuli more easily than do normal people. The damage done is recorded by the pulse and temperature. Physical, mental or emotional unrest is usually indicated by a rise of temperature. Often apparently harmless exercises, such as letter-writing, reading, games; argumentation and disputation are the cause of temperature fluctuations.

Through study of pulse and temperature records patients come to "know themselves," to measure their mistakes, their indiscretions, the manifold accidents of life and recognizing

the dangers strive to prevent and correct them. Self preservation is the first of Nature's laws. To preserve one's self intelligently demands a specialized knowledge of one's self and disease. Therefore it is the duty of the physician to inform the tuberculous fully concerning rest. "Rest should be so engraved on the patient's mind that he will automatically respond to the first symptom of fatigue."

A generation ago, consumptives were overfed, stuffed, surfeited upon raw eggs and milk. The laity still think this the most important part of treatment. As a matter of fact the tuberculous would have better chances of recovery, if they ate less. A heavy and excessive diet throws a strain upon the organs of digestion and excretion. There are no special foods to be emphasized, in the absence of complications. A varied diet containing fresh fruits, fresh green vegetables, meat, eggs, cooked according to preference, milk and its products, taken in moderation at three meals is adequate for the average patient. Raw eggs are difficult to digest, and are rarely indicated. Constipation and diarrhoea should be avoided through correct diet and free drinking of water. Rest before and after meals promotes digestion.

Few drugs are indicated in the care of the average case. Stubborn cough may be alleviated by small sips of plain water, or water with a few drops of aromatic spirits of ammonia, or a few drops of syrup of ipecac, or codein.

Pleurisy usually yields to properly applied adhesive to the chest: to counter irritation; to hot water bag.

Intestinal pains not infrequently respond to violet rays, to sunshine, and at times to 5 cc of 10% solution of calcium chloride intravenously, and more recently cod liver oil $\frac{1}{2}$ ounce floated upon three ounces of Cold tomato juice has been advocated.

When hemorrhage occurs, there should be rest, quiet, and freedom from excitement. The patient should be re-assured and told there is little real danger—that only a small part of his total supply of blood is being lost. He should be reminded that about a pint of blood-cells is destroyed daily, that Nature necessarily restores them and that more can

be easily supplied. The patient should be in bed in a comfortable position, sufficiently elevated to expectorate with least effort. He should not be kept immobile, but his position changed occasionally for comfort and to lessen the chances of pneumonia. If there is much restlessness or anxiety, $\frac{1}{4}$ gr. morphine hypodermatically may be given an adult. Do not repeat the morphine except in severe cases. Cracked ice is helpful in allaying cough and preventing thirst. An ice-bag to the chest, at least prevents the idea that nothing is being done and tends to keep the patient still. No drug acts specifically and decisively in controlling pulmonary hemorrhage. Fibrogen—derived from calf-lung—may be given with a glass of ice water on an empty stomach. The claim is made that it increases the clotting power of the blood. The oral dose is 3 cc. Thrombo Platin—derived from ox brain—may be used in 10 to 20 cc. doses—diluted with a glass of water.

Artificial pneumothorax may be resorted to in a few instances to control hemorrhage.

DISCUSSION—SYMPOSIUM ON TUBERCULOSIS

Dr. Leo F. Hall, South Carolina Sanatorium, State Park, South Carolina:

I just want to say a word regarding raw eggs and sweet milk. I have been working with Dr. Cooper quite a while. As some of you know, he has been a pioneer in putting over the idea that raw eggs are ver indigestible. I believe that they are, and I want to cite one case as an illustration. I had one negro patient who complained of abdominal discomfort over a period of months. The patient was given digestants during this time, but the pain seemed to get worse instead of better. I asked the patient if the nurse was giving him any raw eggs and found that she was not, but he was getting them from home and breaking them into his sweet milk. I advised him to discontinue the use of raw eggs, which he did, and his digestion promptly cleared up. He went on and got well, which you know is unusual, for negroes do not respond very well to treatment. He went home and so far as I know is getting along all right.

Another thing I want to speak of is sunshine. Sunshine is a double-edged sword and should be used only by those who know how to use it. As a matter of fact, if I had tuberculosis I should not want to use it, because the pulse and temperature will go up; and it is certainly a very dangerous mode of treatment, in my estimation. Of course, if you use it, the exposure should be started with a very short time of exposure, two minutes a day, perhaps, feet and ankles, and gradually increased. But I think rest, good food, and fresh air are the treatment.

QUESTION:

Dr. Cooper spoke of cooking the egg instead of giving raw eggs. He did not mention cooking the egg by the addition of a little whiskey. Do you advocate that? Dr. Cooper, closing the discussion:

When I began sanatorium work the patients were getting two raw eggs a day and more if they wanted them. I saw an article in *The American Journal of Medical Sciences* about the indigestibility of raw eggs, and I determined to try it out. Some of the patients in the sanatorium complained of indigestion, some of lack of appetite, some of constipation and other digestive disorders. Without explaining the order in any way, I instructed the housekeeper to discontinue the use of raw eggs but to serve them cooked in any way the patients liked. To my surprise, we had fewer digestive complaints and had many to gain in weight. Raw eggs will cause indigestion and may cause the appearance of albumin in the urine, which may lead one to think the patient has nephritis. Of course, the patient may have a mild nephritis, too.

With respect to whiskey, I have not used it to any extent. Where we have a man who has been taking a little toddy for a great number of years, we have not denied him that privilege; but we have not prescribed it.

FILARIAL AND NON FILARIAL CHYLURIA

By Seale Harris, M. D., Birmingham, Alabama.

Definition. Chyluria is a condition, resulting usually from filariasis and rarely from other diseases, characterized by the presence of chyle in the urine. When chylous urine contains visible blood, which occurs frequently, the condition is called hemato-chyluria. Albumin and fibrin are always present in chyluria and hemato-chyluria. Chyluria should not be confused with lipuria, in which globular fat is present in the urine. Lymphuria has been suggested as the term that best designates murky urine of low molecular fat content.

Classification. Chyluria usually is classified as tropical, or parasitic; and as non tropical, or non parasitic. Functional, or renal chyluria is generally considered in the non parasitic group. Since there is no proof that any other parasite than the *Filaria Bancrofti* causes chyluria it would seem advisable to drop the words tropical or parasitic, and use the binomial, filarial chyluria, for the cases due to filariasis. Marion (1) states that "parasitic chyluria is always due to filariasis." As far back as 1877 Lewis (2) expressed the opinion that "all cases of chyluria occurring in India

are parasitic since he found the embryo (of filaria) in nearly every case." Bancroft (3) stated that "chyluria probably always has a filarial origin in Australia." Manson (4) working in India expressed the same opinion. If the filaria is the offending parasite why not adopt a classification that means something definite and call such cases filarial chyluria, whether the victim who contracted filariasis in the tropics remains there, or has migrated to Europe or the United States? The very rare cases not due to filaria should be designated by the disease or condition which causes the chyluria, if the etiology is known; if not, why not call it non-filarial, or sporadic, or as Guiteras (5) suggested in 1885, idiopathic chyluria. The cases considered as functional, or renal, belong to the non-filarial class, yet there is no positive evidence that chyluria is ever functional, though there are strong presumptive reasons to believe that it is sometimes due to renal insufficiency.

History. The history of chyluria dates back to the time when Hippocrates taught and practiced medicine on the Island of Cos. Sanes and Kahn (6) quote the "Father of Medicine" as describing several cases of "fat in the urine," among them a woman who passed "oily urine" a few days after the birth of her child. It is likely that filariasis must have been prevalent in the Grecian Isles during the days of Hippocrates, because climatic conditions in that region would seem to be favorable for the propagation of the *Culex fatigans* mosquito that transmits filaria. It therefore seems probable that the cases of chyluria which Hippocrates described were of filarial origin. Besides non-filarial chyluria is such a rare condition that neither Hippocrates nor any other physician in history is likely to have seen many cases. The peripatetic Galen, who practiced medicine in his native Greece until he was thirty, then became the most renowned physician in Rome, and then lived and died in Sicily, also must have been dealing with filarial chyluria when he described "three varieties of oleoagenous urine." (7)

A number of references to chyluria have been found in medical literature since the early Christian Era when Galen, the great practitioner lived, though but little progress was made towards discovering its origin until

in the sixth and seventh decades of the last century when a number of workers in various tropical and sub-tropical countries, associated it with the nematode, filaria. The first important step in connecting chyluria with filariasis was made in 1866 when Wucherer (8) of Bahi, Brazil, while searching for Bilharzia in chylous urine, discovered the embryo of filaria, now known as micro-filaria. Lewis (9), working in Ca'cutta, without any knowledge of Wucherer's discovery, in 1870, found micro-filaria in milky urine. Lewis' observation was verified by Palmer and Charles in Calcutta who found the embryo in the chylous urine of two other patients.

William Mastin, (10 of Mobile, who in 1888 published one of the most comprehensive papers that has been written on filariasis, including filarial chyluria, gives Lewis credit for first discovering micro-filaria in the blood, in 1872. Lewis, then not knowing that he was dealing with an embryo, gave it the descriptive title of *Filaria sanguinis hominis*. Manson-Bahr (11), however, states that in 1863 Demarquay found micro-filaria in the blood. In 1867 Bancroft (12) in Brisbane, Australia, found the adult filaria in a lymphatic abscess in man. Cobbold (13) announcing Bancroft's discovery named the adult worm filaria Bancrofti. Bancroft's discovery was verified in 1877 by Aurajo (14) in Brazil, and Manson (15) in China. The latter found a living adult filaria in a lymphatic and Manson then announced the belief that the adult filaria by blocking the distal lymphatics caused chyluria, elephantiasis and other conditions which could result from lymph stasis.

Bancroft and no doubt others suspected the mosquito as transmitting filaria but it remained for Manson (16) in 1877 to prove that the female of the *Culex* mosquito was the intermediate host in filariasis. Manson also demonstrated the periodicity of microfilaria in the blood of man, proving that they could be found in the blood of the filarial patient in large numbers at midnight and that they were absent, or very few, in the peripheral blood at midday. In 1877 and 1878 physicians in many tropical countries found the micro-filaria in the blood and urine of their chyluria patients.

Chyluria due to filaria was first proved in

the United States in 1884 by Guiteras (16) who found microfilaria in the blood of four Cubans in Key West. The following year, 1885, he, with deSaussure (17) found micro-filaria in the blood of a chyluria patient who had never been outside of Charleston, South Carolina, thus proving that filariasis was endemic in that city. Two years later they reported four more cases of chyluria in which micro-filaria were found in the blood.

Mastin (18) in 1887, reported a case of filariasis in which he found micro-filaria in the blood of a man who had never been away from Mobile, thus proving another focus of infection of filaria in the United States. Mastin had two other cases; and in 1888 he had collected from the literature twelve cases of filariasis in the United States, in nine of which chyluria, or hematochyluria, was the important pathological condition present. Mastin collected a bibliography of 126 articles on filariasis, including chyluria as the most frequent manifestation of the disease.

The writer was physician in chief of the City Hospital in Mobile from 1906 to 1913 and during that time no case of chyluria was admitted. He saw one case in consultation, a white man who many years before had lived in the tropics. No micro-filaria could be found in his blood or urine. It was assumed that the adult filaria were dead but the obstructive lesion of the thoracic duct or smaller lymphatics accounted for the chyluria. In so far as can be learned there has not been a case of chyluria in Mobile for twenty years. It, therefore, seems probable that filariasis has ceased to exist in that city.

Distribution. Chyluria is largely of filarial origin and its distribution like that of its parental disease, filariasis, is in the tropics of various parts of the world. It is remarkable, however, that in some countries, notably in the Pacific Islands, in which a very large proportion of the population are infected with filaria, chyluria is practically unknown; while in other tropical countries as in India, China and North Africa in which filariasis abounds chyluria is frequently seen. (Manson-Bahr [19]).

In 1903 Ashford (20) estimated that 20 per cent of the native population of Porto Rico had chyluria. The incidence of filarial

chyluria no doubt has decreased since mosquito control measures have been carried out in San Juan and other cities and towns in Porto Rico. In reply to an inquiry regarding the incidence of filarial chyluria in the American tropics, Dr. R. C. Conner (21), who was chief of the Medical Service of Ancon Hospital, Canal Zone, for 20 years and is now assistant Medical Director of the United Fruit Company, says:

"We have not received any special reports on chyluria or filariasis. The fact is that we have very little filaria infection in any of our Divisions." (The United Fruit Company has more than 100,000 employes in Cuba, Jamaica, Guatemala, Honduras, Panama and Colombia, and maintains first class hospitals in all those countries.) The only case worth mentioning occurred in one of our Cuban Divisions, where we imported several thousand Haitian cane cutters each year prior to 1929. There are several districts in Haiti which are heavily infected with filaria. While in Panama I saw a few cases of chyluria, but can recall only one case in which we were successful in finding filaria in the blood. This case was from Cartagena, Colombia—a man 64 years of age. Rarely is a case reported from Costa Rica. It has occurred there in natives who, so far as we are able to determine, have never been out of that country. It is my impression that most of the endemic centers of importance in the American tropics are to be found on the Islands in the Caribbean sea extending from Porto Rico to Venezuela."

Lyon (22) in 1917 collected from the literature 142 cases of filaria in the United States. Chyluria or hematochyluria was present in 36. Lyon thinks that since the *Culex quinquefasciatus*, the mosquito which transmits filarial infection, is found in abundance as far north as Washington, St. Louis, and San Francisco, there must be other filarial foci than Charleston. He mentions a few cases of what was thought to be indigenous filaria that have been reported in the United States. Barnes (23) in Washington, in 1913,

Slaughter (24) in Alexandria and Dunn (25) in Philadelphia each reported a case of filaria. Where there is filariasis there is chyluria and more cases would be found if filariasis were endemic anywhere in the United States. The only locality in the United States in which filariasis is known to be endemic at this time and in which parasitic chyluria is found among the natives is Charleston, South Carolina. Of the 494 cases of filariasis collected by Johnson (26) during and prior to 1915, 244 had chyluria. Francis (27) of the United States Public Health Service in 1919 made a survey, searching for filaria in the south. He could find no evidences of filarial infection in Savannah and Milledgeville, Georgia, Jacksonville, and Tampa, Florida, Mobile, Alabama and New Orleans, Louisiana. His conclusion was that filaria, and therefore filarial chyluria does not exist in the South except in Charleston, South Carolina.

Dr. Robert Wilson, Dean of the Medical College of South Carolina, in January, 1931 writes:

"Filariasis (and therefore filarial chyluria) has been endemic in Charleston. In 1890 Dr. P. G. DeSaussure reported 22 cases of filariasis. Fifteen years ago Dr. Francis of the U. S. Public Health Service made a study of the situation here and found quite a heavy infection. In the Old Folks Home, a Home for aged negroes, micro-filarias were demonstrated in the blood of 35% of the inmates. In 1915, Dr. F. B. Johnson found 19% of the patients of Roper Hospital infected. Since then there has been a very pronounced decrease in the number of cases. Two years ago Dr. Johnson found only 2% of the inmates of the Old Folks Home infected, and the last two years there have been only two cases of filariasis in the Roper Hospital. It is probable that an intensive examination would show a heavier infection than this as only those cases showing chyluria or elephantiasis have been examined. Even so, however, there has been a very marked decrease in the incidence of the disease."

It would seem that filariasis and chyluria will soon cease to exist in Charleston, as

mosquito control work is carried on. Johnson and Francis have shown that it requires a heavy infestation of mosquitoes with filaria, for the transmission of enough microfilaria to the human host to produce filariasis in man.

Dr. C. C. Bass, (29) Dean of Tulane Medical School, was kind enough to investigate the records of Charity Hospital, in New Orleans, the largest hospital in the south, and no case of chyluria has been admitted to that institution for twenty-two years. Dr. Charles Sidney Burwell, (30) Professor of Medicine in Vanderbilt University in Nashville, Tennessee, reports 40,000 admissions to the hospital, and out patient department, without a case of chyluria or filariasis. Mr. J. E. Ransom (31) at the request of Dr. Warfield Longcope, Professor of Medicine, Johns Hopkins University, examined the records of John Hopkins Hospital for chyluria and no case was recorded of the 118,609 patients. Hampton and Wood of the Brady Urological Clinic, Johns Hopkins have each reported a case of non-filarial chyluria. No cases of chyluria have been recorded in the Hillman (Birmingham and Jefferson County—all charity) Hospital of the 76,000 admissions. (Carter) (32) In the first million of the United States draft recruits during the World War (1917) no case of chyluria or filariasis was reported. (Ashburn) (33)

It would seem from these reports from various medical centres, that filariasis, and therefore, filarial chyluria does not exist in the Southern part of the United States, except in Charleston, South Carolina, and that it will be only a short time before it will be eradicated in that locality.

Non-filaria' of sporadic chyluria, also called "European chyluria," has been reported as a rare condition in many civilized countries. About 100 cases have been reported in Europe, most of them in Germany; but one author pointed out that a study of the European literature on chyluria showed that a number of those cases had lived, or had travelled in the tropics where they may have contracted filariasis years previous to the time when the chyluria appeared. The fact that no microfilaria is found in the blood in chyluria, does not mean that the case is not of filarial origin, because, if there is organic obstruction of the

thoracic duct, or the lesser lymphatics, chyluria may appear and persist long after the adult filaria are dead and have ceased to produce the larvæ (microfilaria) that circulates in the blood. Non-filarial, or sporadic, chyluria is of very rare occurrence in the United States and a study of the few cases reported in American medical literature shows that several of the victims have lived in the tropics. Welfeld (34) is the only man in the United States who has reported as many as two cases of non-filarial chyluria. It is probable that cases occur which have never been reported, as the case seen by Turlington, (35) of Birmingham, and one by Burch (36) of Nashville. Certainly the non-filarial type is so rare that the patient should be questioned very carefully to determine if he has not been in the tropics, or in Charleston, South Carolina at sometime in his life, long enough to have become infected with filaria.

Etiology. Anatomically chyluria is due to an obstruction of the lymph channels, usually the thoracic duct, with resulting dilatation of the lymphatic (varicosities) in the kidney, or bladder. Rupture of a varix, or a dilated lymphatic, into the tubules, or calices, of the kidney, or into the bladder, or, much less likely, into a ureter, allows the entrance of chy'le into the urinary tract. The obstruction in the thoracic duct, or other lymph vessel may be (a) in the lumen; (b) in the walls of the vessel; or (c) it may be of extrinsic origin by pressure on the thoracic duct or the lesser lymphatics. Obstruction within the lumen of the thoracic duct or lymphatic may be due to a thrombus, or to coils of male and female adult filaria. Stenosis, or even occlusion, of the thoracic duct and its tributary lymphatics may be due to inflammatory changes in the walls of the vessels as has been found in filariasis. Extrinsic causes producing pressure on the thoracic duct are tumors, enlarged glands, tuberculosis of the mediastinum, aneurysms, or inflammatory masses. Hunt (37) reported a case due to trauma. The chyluria followed a severe injury of a man who fell from a height of ten feet. The chyluria passed off in a few days.

Chyluria may be produced by the burrowing of filaria, or echinococcus, or other parasite either from a lymph vessel into the urinary

tract, or from the urinary tract into a lymphatic as possibly occurred in the case of a negro from the West Indies reported by Rosenbeck and Rhodenburg. (38) The chyluria followed a *Cercomonas hominis* infection of the urethra and bladder. In this case the chyluria persisted after the *Cercomonads* had disappeared from the urine. It seems possible that the *Cercomonads* burrowed into a dilated lymphatic caused by filarial infection, though no *microfilaria* (*filaria larvæ*) were found in the blood or urine of the patient, who probably had harbored *filaria* in his lymphatics for years without symptoms.

Malaria as a cause of chyluria was suggested by Quarello (39) who reported a case of estivo-autumnal malaria in a patient who had intermittent chyluria that was stopped after the administration of quinine. It is difficult to account for malaria causing chyluria, though theoretically malarial parasites may block a lymph channel, as they have been known to obstruct the blood vessels of the brain, producing symptoms similar to a cerebral thrombus. It is possible that Quarello's patient may have had damaged lymphatics from filarial infection though no *microfilaria* were found in the blood. A search of the literature reveals only a few cases of filarial chyluria reported in the South. It may be stated in passing that malaria is being eradicated in the south at a rapid rate and in recent years the severe forms rarely are seen. It would seem if chyluria could be due to malaria that cases would have been reported in the districts in the South in which the severe forms of malaria formerly prevailed.

Functional chyluria seems possible; though most of those who have studied the question think it due almost entirely to pathology in the lymphatic system causing obstruction and back pressure of lymph. Lipuria of functional character is seen, not infrequently in diabetes, usually—not always—disappearing when the diabetes is under control. It unquestionably is true that there is a low renal threshold for sugar, since a number of cases of glycosuria have been reported with normal, or even sub-normally low blood sugar readings. It seems entirely reasonable to assume that the kidney cells may lose their normal power of preventing molecular fat from filtering out of the

blood into the tubules of the kidneys, thus producing a chyluria. In other words, there may be a low renal threshold for chyle and lymph in the kidneys in rare cases. Certainly cases of non-filarial chyluria have been reported in which it is difficult to explain their pathogenesis on any other grounds than functional.

One of the notable cases of supposed functional chyluria was that reported by Sanes and Kahn (40) in which no pathology of any kind could be discovered after most thorough investigation. Their conclusion was as follows: "Chyluria in this case was due to passage of (molecular) fat from the blood directly into the urine through the kidney epithelium, due to disturbance of the function of the kidney cells." Hampton cites a case reported in 1862 by Waters (41) who could find no cause for the chyluria and concluded that on account of changes in the renal capillaries that albumin, fibrin and fat filtered from the blood vessels of the kidney into the urine.

Another case of chyluria apparently due to functional disturbances of the kidney was reported by Hauge (42). The patient was an alcoholic, a "heavy butter eater," who had chyluria, which disappeared after placing the patient on a low fat diet and eliminating alcohol. Repeated examinations of the blood revealed no *microfilaria* and no other cause for the chyluria could be found. The fact that the chyluria disappeared on changing the diet and habits of the patient suggests a functional cause in this case.

Lagemann (43) reported the case of a malingerer policeman who produced artificial chyluria by injecting milk into his bladder.

Pathology. There is an abundance of evidence to prove that the essential pathology of chyluria is in the lymphatic system. Hertz (44) reported the case of an English sailor, age 66 who had acquired a filarial infection in the tropics 20 years before, and who began voiding chylous urine nine months before his death. The post mortem findings of this case describes the pathological changes that take place as a sequel of filarial infection of the thoracic duct:

"The thoracic duct was found to be impervious about 7 cm. below the diaphragm. The abdominal lymphatics were much dilated and a well marked anastomosis between

the lacteals and the lymphatics of the right side of the bladder. Mercury could be injected at low pressure in a direction contrary to the normal flow from the upper abdominal lymphatics to the bladder. Inside the bladder at a point corresponding to the dilated lymphatics an elevated spot was found which seemed to have marked the position where the chyle escaped into the urinary tract. Obstruction of the thoracic duct due to fibrous stenosis was secondary to filarial infection. The filaria had been dead for years but the thoracic duct pathology remained."

The necropsy report of Mackenzie's (45) case of chyluria is one of the best in the literature. He found a stenotic thoracic duct in a mass of lymphatic tissue and glands. The thoracic duct was filled with a clot. The lymph sinuses were enormously dilated. The iliac, lumbar and renal lymphatics were enlarged and dilated. Mackenzie was not sure of the site of communication of a lymph vessel into the urinary tract, but thought it due in this case to a ruptured varix in the left kidney.

Manson, (43), in an autopsy on a case of filarial chyluria found a thrombus in the thoracic duct. The lymphatics of the kidneys were dilated, but the communication with the urinary tract could not be found, though it presumably came from the kidney lymphatics. Lowe (47), found in one case no pathological changes in the lymphatic system, except calcified filaria in dilated renal lymphatics. There were varicose lymphatics in the bladder wall, but no fistula was found. Ridley Mackenzie (48) of Montreal reports the case of a West Indian negro who had filarial chyluria. On cystoscopic examination a lymph varix was found in the bladder wall.

The association of chyluria with other manifestations of lymphatic obstruction due to filaria is frequent. In the 244 cases of filarial chyluria collected by Johnson (49) in Charleston, 8 had elephantiasis. Cheer and Pai cite the case of Magnus Levy (50) of a girl who exuded chyle from a sinus in her left hip for fifteen years. The sinus closed spontaneously after she developed chyluria. Zakaroff (51) reported a case of chyluria associated with elephantiasis of the leg due to filaria. Carter (52) reported a case of chyluria associated with lymph scrotum. There are many other cases in the literature reporting other complications of filaria associated with chyluria.

Kutzman (53) reports a case of chyluria associated with a perinephritic abscess, which communicated with the kidney through a sinus. There was dense inflammatory tissue around the kidney and no opening from a lymphatic into the kidney could be demonstrated but nephrectomy cured the chyluria.

Very little is known of the pathology of non-filarial chyluria. In the few cases in which the cause has been known the pathology is either inflammatory or of a mass pressing on the thoracic duct, or tributary lymphatics. No pathology has been found to account for the functional cases.

Symptoms: The onset of chyluria is usually sudden. Often the first and only symptoms is the passage of milky urine containing small amounts of blood. Sometimes there is pain in the lumbar region and in the lower part of the abdomen. Not infrequently small clots are passed in the urine, and occasionally there is retention of urine from coagulation of chylous urine in the bladder. Clinto (54) states that cases have occurred in which the bladder has to be opened and drained because of retention due to clotting of the urine in the bladder. Colicky pains occur rarely, perhaps due to clotting of urine in the ureters.

The amount of chyle in the urine varies at different hours of the day, usually being more pronounced at night when in the recumbent posture. Sometimes the chyle disappears from the urine after arising and after exercise. Charteris (55) reports a case of chyluria that could be controlled by posture, the morning urine was milky and the urine became clear when standing. Chyluria could be brought on at any time of the day by drinking a glass of milk and reclining at an angle of more than 45 degrees. He concluded that obstruction in the thoracic duct was operative only when the patient was in the reclining position. Other observers have also noted the change in the amount of chyle in the urine by change in posture. Mackenzie (56) had a patient in whom the chyle in the urine increased at night and decreased markedly during the day. Microfilaria were found in the blood at night. By having the patient rest in bed during the day and stay up at night, the chyle in the urine was increased during the day and decreased at night and the microfilaria dis-

appeared from the blood during the night to appear during the day.

Courty (57) reports a case of olinostatic chyluria in which the horizontal position would provoke an attack at any time. In another case an asthmatic paroxysm would bring on chyluria. Lindsay (58) mentions a case in which chyluria could be brought on by the patient lying down in the afternoon. He cites another case in which lying on the right side would prevent, or relieve the chyluria. Bence-Jones (59) case was free from chyluria at night but the chylous urine would reappear when walking during the day. Wood (60) also reported a case of orthostatic chyluria. Goldsmith (61) reports a case of chyluria who had been bedridden for months and while being carried in a wagon over rough roads the chyluria disappeared not to return. He accounted for the sudden relief of the chyluria from probably jarring loose a thrombus in the thoracic duct thus relieving the obstruction to the flow of chyle in the normal channel.

Chyluria may continue for years or it may disappear for weeks, months or years only to reappear without apparent cause. Salkowski (62) reports a case of chyluria in which periodicity was noted and he called attention to the fact that treatment sometimes has been thought to be effective when in reality it was only the remission of cases of recurring chyluria.

The amount of chyle in the urine depends to a great extent upon the diet. It can be made to disappear altogether on fat free diet and can be increased in amount by giving a high fat diet. It seems definitely proved that the fat in chylous urine comes only from ingested fat and never from fat in the tissues. Hertz (63) found that the amount of fat in chylous urine is not affected by increasing or decreasing the amount of proteins and carbohydrates in the diet. Hertz also found that by feeding a patient on a fat free diet that the urine became free from chyle, and that after a high fat meal the chyle reappeared in the urine in 33 minutes. The chyle in the urine rose to its highest point in 5 hours and disappeared by abstinence from fat for 8 hours.

Chyluria has been brought on in a number of cases by severe muscular exertion, and in

women after confinement. Rao (64) reports a case coming on after confinement and there are a number of such cases reported in literature. It is thought that from intense muscular exertion as in the straining of parturition a dilated and damaged lymph vessel ruptures into the urinary tract. In such cases the fistulous opening may heal in a few days when the chyluria disappears, but in other such cases the chyluria is permanent.

In the great majority of cases the presence of chyle in the urine does not affect the health of the individual. In others there is loss of flesh and weakness. Pronounced mental depression has been observed. Sometimes, rarely, the chyluria patient becomes very much emaciated and dies from exhaustion. In the case seen by the author a lymphatic ruptured into the peritoneal cavity and the patient died of peritonitis.

The Urine: Chylous urine varies in appearance from a thin, cloudy milkiness to a thick creamy consistency. More often it is white and looks like milk. The fat content varies from one to three per cent measured by the Babcock method, and after a high fat meal the amount of fat may rise to 4.5 per cent. When blood is present the urine has a pink or reddish color.

Soon after chylous urine is voided the fat rises to the top and the turbid urine containing the red blood cells and leucocytes sink to the bottom, giving a reddish color to the lower portion. Sometimes the urine becomes almost a gelatinous mass, but usually dotted flakes are seen on top of the fatty layer. The fat of chylous urine may be extracted with ether leaving the urine clear or cloudy. Chylous urine always contains albumin and fibrin; and red and white blood cells in varying amounts. The albumin content is often high. When sugar is present it means a coincidental diabetes. Microscopic examination shows finely divided, molecular fat particles, white and red blood cells and fibrin. Microfilaria may be found in the urine of chyluria due to filariasis; but the absence of microfilaria in the urine does not mean that the chyluria is not of filarial origin.

Diagnosis: Chyluria may be distinguished from lipuria by the fat globules found in the latter and the molecular fat which is found in

chylous urine. Chylous urine also contains albumin, fibrin, red blood cells, and sometimes microfilaria. When the fat is extracted by ether from the urine in lipuria the clear urine remaining does not contain albumin or fibrin. Chyluria is found associated with filariasis most frequently while lipuria occurs after fractures of long bones, in obesity, diabetes and fatty degeneration of the liver and kidneys. The urine in pyuria may have a milky appearance but microscopic examination of the urine reveals myriads of leucocytes and no molecular fat.

Cystoscopic examination in chyluria is indicated, and as in the case of MacKenzie, (65) may reveal a lymphatic varix into the bladder wall. It should be remembered that small bladder diverticuli may be mistaken for fistulous openings. In this case cauterization of the chylous fistula in the bladder stopped the chyluria. Cystoscopy sometimes determines that the chylous urine comes from one or the other ureter. Hampton (66) pointed out from a study of his case of non-parasitic chyluria that both ureters should be examined at the same time, that chylous urine may come from one ureter at one examination and from the other, or both ureters at another time. Welfeld (67) also called attention to the fact that repeated cystoscopies may be necessary before determining the source of the chyluria.

Wood (68) calls attention to the value of a pyelogram in studying the chyluria patient. A pyelogram in his case suggested a definite communication between the lymphatics of the kidney and the system of juxta-aortic nodes which empty into the thoracic duct. In Wood's case the chyluria ceased after pyelography.

X-ray examination of the chest and abdomen is indicated in cases of non-parasitic chyluria to determine if there are mediastinal tumors, aneurism, or abdominal neoplasm, which by pressure may obstruct the lymphatics.

Prognosis: The prognosis of chyluria depends upon whether or not the cause can be discovered and removed. In the cases in which cystoscopic examination reveals a lymphatic fistula in the bladder the chyluria may be stopped by cauterization. In filarial chy-

luria the prognosis is usually good as to life, and health, though the chyluria may persist for years. Chyluria often stops spontaneously only to reappear again in months or years. It is for this reason that it is difficult to decide whether or not treatment affects chyluria, though the proper diet may improve the nutrition and general well being of the patient.

In non-filarial chyluria brought on by pressure of malignant tumors, or by tuberculous glands, on the thoracic duct and its tributaries the prognosis is bad.

Treatment. Treatment affects the course of few cases of chyluria. The diet is important. Fats should be restricted and the body fat maintained by a high carbohydrate and a moderately high protein diet. Water should be drunk freely to keep the urine diluted. It is not likely that the increased output of urine from drinking water freely will increase the fat loss in chyluria, and the greater the dilution of urine the less likely the formation of clots in the bladder. When there is retention, or difficult urination, from clotting of urine in the bladder, or urethra, irrigation of the bladder with 5 per cent boric acid solution or with 10 per cent sodium citrate solution gives relief. Manson-Bahr suggests the following styptic solution for bladder irrigation in hematuria:

Rx. Adrenalin.....	1-1000 Ozs. i
Zinc sulph.....	Gr. v
Saturated boric acid sol. q. s....	Oz. x

Castellani (70) advises methylene blue in 2 grain doses, or salo' (5 grain), or urotropin (5 grains) but it is doubtful if any of the so called urinary antiseptics are indicated, or are of any value, in chyluria.

If, as in the case of Blach, (71) on cystoscopic examination, the opening of a lymphatic fistula in the bladder is found cauterization may give relief, but such cases are rare. Pope (72) also demonstrated on cystoscopic examination a chyle sinus in the bladder trigone. Kutzmann (73) advocates lavage of the kidney pelvis with weak solution (1 to 5 per cent) of silver nitrate, if by repeated cystoscopic examinations the chylous urine has been proved to come from one kidney. It will be recalled that in Wood's case the chyluria was

relieved by injection of the kidney pelvis for a pyelogram.

Arsphenamin (Pilcher) (74), novarsenobenzol (Deschamps) (75), neosalvarson (Lower and Belcher) (76) soamin (Connor) (77) and other arsenical preparations have been used intravenously, with varying success in filarial chyluria, with the idea of destroying the adult filaria and the millions of microfilaria that are in the blood. O'Neil (78) quotes Manson, as doubting the advisability of attempting to destroy the adult filaria that when a worm dies in a lymphatic infection and abscess formation in the deep structures may result. In China and India antimony and sodium tartrate are employed intravenously in filarial chyluria (Cheer and Pai). (79).

Surgery offers hope of relief in an occasional case of chyluria, but only in cases of proved secondary infection of one kidney while the other kidney is known to function normally. Kutzmann's case of a chyluria associated with a perirenal abscess, in which a successful nephrectomy cured the chyluria is a good example of a case in which surgery is indicated. Kidd (81) operated successfully in a case of pyonephrosis associated with chyluria. Kidd (82) in a later article on the surgical treatment of chyluria gives the following indications for surgery in that condition: "If chyluria is unilateral, and if drugs fail to cure it, and if the patient is losing weight or suffering pain, nephrectomy is justifiable and may effect a cure."

Schall, Judd, Keyser, Faulds, Verbruge and Kutzmann (83) in their review of urological surgery for 1927 are conservative in summarizing the surgical treatment of chyluria as follows: "Operative treatment in chyluria seems radical and hardly indicated in uncomplicated cases."

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SURGERY

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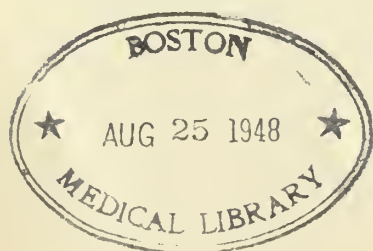
THYROTOXICOSIS FOLLOWING SUB-TOTAL THYROIDECTOMY FOR EXOPHTHALMIC GOITRE

Thyroidectomy is generally considered an excellent and almost certain method of obtaining relief in cases of exophthalmic goitre. And so it is. However in some instances a degree of thyrotoxicosis is present after operation. With a view of determining the incidence and cause of this, Dr. W. O. Thompson, A. E. Morris, and P. K. Thompson studied a series of cases of exophthalmic goitre upon whom a thyroidectomy had been performed by a number of surgeons at the Massachusetts General Hospital. Their article is published in the Archives of Internal Medicine of December, 1950.

There were sufficient data in 197 unselected cases. Several months after operation, in 37 of these (19½%) there was a definite clinical thyrotoxicosis with the basal metabolic rate ranging from plus 19% to plus 69% without any medication. In these 37 cases the disease was of mild degree as all of these patients were able to follow some occupation. In only two cases was there evidence of a true recurrence rather than a persistence of the disease. In half of these cases the basal metabolic rate could be held to a low level by prolonged administration of iodine; in 40% the iodine was ineffective or eventually became so. In these latter cases reoperation was recommended. The surgeons who did the most radical thyroidectomy had definitely a smaller percentage of post-operative thyrotoxicosis than did the surgeons who had less experience and usually did a less extensive thyroidectomy.

From these observations certain conclusions were drawn. Thyrotoxicosis following sub-total thyroidectomy for exophthalmic goitre appears in most cases to be caused by the leaving of too much thyroid tissue at the time of operation. Thyrotoxicosis is almost always present if following operation there is sufficient thyroid tissue to be easily palpable. The severity of the symptoms roughly parallels the amount of the tissue. The post-operative administration of iodine does not prevent the regeneration of thyroid tissue or a persistence of thyrotoxicosis. The marked chronicity of thyrotoxicosis when present following sub-total thyroidectomy suggests that in such instances the disease may last as long as it would have if no operation had been performed. A reduction in the incidence of post-operative thyrotoxicosis without an increase in the incidence of myxedema tetany, or paralysis of the recurrent laryngeal nerve will occur only when more radical thyroidectomies are performed by surgeons specially trained to do this type of work.

ED. NOTE—The above conclusions hold almost equally in cases of adenomatous goitre with hyperthyroidism. Generally in the cases in which the best final results are obtained, there is a definite hypothyroidism which appears about one month after operation and lasts from one to three months. The normal thyroid balance is acquired by the growth of the remaining thyroid tissue. This is practically complete by the end of six to eight months, but generally not fully so before twelve months or longer. Foci of infection are important factors in the etiology of true recurrences.



THE UROLOGICAL ASSOCIATION OF SOUTH CAROLINA

DIFFERENTIAL DIAGNOSIS OF PAIN IN THE ILIAC REGION

By T. M. Davis, M. D., Greenville, S. C.

During the past ten years it has been gratifying to note that the Urologists have been utilized more frequently in the differentiation of conditions giving rise to pain in the right iliac region. At the present time, however, the urologist is consulted too frequently by patients that have had their appendix removed in which they find a stone in the right urological tract that may have been the primary cause of their consulting a physician. A brief discussion on the differential diagnosis of appendicitis and obstructions in the lower right ureter, will, I hope, tend to lessen the occurrence of this sequence of events.

It is only possible to be absolutely positive as to the pathology of the appendix after the abdomen has been opened and the appendix is given a visual inspection, following which examination the patient is physically incapacitated for several weeks or longer.

It is possible to make an accurate positive diagnosis of the conditions in the right ureter within a very brief time, without very great discomfort to the patient, and best of all, he is not physically incapacitated for more than twelve to twenty-four hours.

PAIN—The pain of acute appendicitis is usually of a generalized abdominal character, or epigastric, at first, gradually localizing in the lower right quadrant, sometimes the epigastrium. This pain is usually constant in character without any remissions, the pain rarely if ever radiated to the lower genitals; vomiting increases the pain of appendicitis; there is usually restricted respiratory movement of the abdomen. The pain of chronic appendicitis is extremely variable.

The pain in ureteral obstruction is usually localized from the beginning to the side involved; rarely is it epigastric except after

prolonged vomiting, the pain is practically always intermittent in type, is temporarily relieved by vomiting. (This is explained, as the cause of ureteral pain is due to the back pressure and distention of the ureter by retained urine, the increased intra-abdominal pressure incident to vomiting forces some of the retained urine by the obstruction, giving a slight decrease in the back pressure and distention temporarily, hence temporary relief of pain is observed.) The pain usually radiated to the lower genitals, there is apt to be frequency of urination of more or less degree.

NAUSEA & VOMITING—which accompanies acute appendicitis is usually not marked and as already mentioned increases the pain. The vomiting of ureteral obstruction is usually marked and persistent for several hours unless the obstruction is relieved, the vomiting gives temporary relief of pain, oftentimes the patient will be found to be inducing vomiting as they have learned to associate it with the relief of pain.

There is always an elevation of the temperature in acute appendicitis which, however, may be only a degree or two and may only persist for a short time. In ureteral obstruction of the acute type there is usually some elevation of the temperature from one degree to as high as 10 degrees F. even in the absence of infection: fever when present usually persists for one or more days.

PHYSICAL EXAMINATION — In acute appendicitis the patient will have general abdominal tenderness with generalized rigidity at first, although in some patients this is entirely absent. There is gradual localization to the lower right quadrant, or in post caecal appendix to the lumbar region. In chronic appendicitis the tenderness is very variable and there is practically no rigidity.

In ureteral obstruction, there is never any generalized tenderness or rigidity, these are usually over and along the course of the ureter and in the lumbar region; percussion over

the suspected kidney will elucidate deep tenderness which is not present in appendicitis.

HEMATOLOGY—The leucocyte count is practically always elevated in acute appendicitis; it may be slight or as high as twenty thousand with a corresponding increase of the polymorphonuclears.

The leucocyte elevation in acute ureteral obstruction is usually not very high and the polys are not increased as much in proportion as is the case in acute appendicitis.

URINE—In acute appendicitis, the urine is normal unless there is an adherent appendix to the ureter; in such a case there may be a few red cells in the urine. One must not overlook the fact that there may be an old unrecognized urological pathology present to becloud the issue.

In ureteral obstruction due to calculus there is usually found from a few red blood cells to macroscopic blood in the urine, a few pus cells and albumen. In stricture and kink of the ureter there may be a few red cells, though more often there is a normal urine. The absence of blood cells in the urine does not rule out ureteral conditions.

Urological examination—It is with the use of modern urological equipment that it is possible to make an accurate diagnosis of the presence or absence of any pathology in the urological tract.

X-RAY— This will in seventy-five percent or more of the patients show a demonstrable shadow in the film; twenty percent of the stones do not cast a demonstrable shadow. In my opinion all patients before being operated upon for appendicitis should have the benefit of an X-ray of the urological tract, there is no danger or unnecessary delay and many needless operations may be avoided.

CYSTOSCOPY—Observation of the bladder will often reveal a stone impacted in the ureteral orifice, the removal of which will immediately relieve the symptoms. The passage of an olive-pointed catheter or bougie that has had the tip dipped in melted bees wax up the ureter will detect a stone by the

production of scratches on the wax, and often particles of stone will be adhering to the wax. This test is one of the most accurate we have for diagnosing calculi and is practically one hundred percent positive when present. Passage of a catheter with a bulb 12 F. in size about one inch from the tip will give a hang when stricture is present and will not be large enough to produce muscle spasm of the ureter. X-ray with the catheter in situ will show the shadow in apposition to the catheter, if the shadow is in the ureter, a double exposure made on the one film shifting the x-ray tube as for a stereoscopic picture will show a double shadow, if the suspected shadow is within the ureter it will be in apposition to the catheter in both shadows, if extra-ureteral it will not be in the same relation to the catheter in both shadows.

The passage of a catheter above the obstruction and allowing the retained urine to escape will cause an immediate cessation of the pain and the muscle rigidity in the absence of infected urine, if drainage of uninfected urine does not relieve the pain, tenderness and muscle rigidity materially, you have appendicitis as well as ureteral obstruction. I have by this method made a correct diagnosis of acute appendicitis where there was also a stone present.

A Pyelo-urogram made by injecting some opaque solution usually 12% sodium iodide withdrawing the catheter and injecting some of the solution as the catheter is withdrawn and an x-ray film made will outline the renal pelvis and ureter, showing the site of the obstruction with a dilat'ion of the ureter above, the shadow cast by a stone will be obliterated, if the film is made with the patient in the upright position, the presence of ureteral kinks will be shown, There may be narrowing of the ureter at the appendix area if this organ is adherent and acutely inflamed.

In conclusion—a patient should never be operated upon for chronic appendicitis without first having definitely eliminated disease of the urological tract.

SOCIETY REPORTS

COLUMBIA MEDICAL SOCIETY

Columbia Medical Society Hall, January 26, 1931, 8:30 P. M.

Second regular meeting of the month.

Society called to order by the president Dr. James S. Fouche at 8:30 P. M.

Minutes of last regular business session and C. P. C. meeting read and adopted.

Dr. F. M. Routh gave a very interesting report on the sterilization of mental defectives and criminals, citing examples over various states and giving a list of the states which now had such operations enforced. Dr. S. E. Harmon moves that the society go on record of approving the sterilization of mental defectives and certain types of criminals in this state. A committee of three appointed by the president to work out these details. Motion seconded, discussed and passed. Committee appointed: Dr. F. M. Routh, chairman, Dr. S. E. Harmon and Dr. W. R. Barron.

Auditing committee report given by Dr. Barney Heyward. The report shows the financial status of the society at a very low ebb due mostly to the acquisition of a new library and new lamps and lanterns. Motion to accept report and thank committee for its diligence seconded and passed.

Motion that Dr. F. M. Routh be reimbursed for book concerning sterilization of mental defectives and it be placed in the library for the use of members.

Dr. Ernest A. Hensley elected a member of the Columbia Medical Society by ballot.

Dr. J. M. Davis voted a member of the Columbia Medical Society as a transfer from the Hillsboro Medical Society, Tampa, Florida.

Dr. Heyward Gibbes moves that the program committee of the society be authorized to spend \$500.00 annually if treasury is so fit to stand it to be used in defraying the expenses of the invited guest. Motion discussed, seconded and passed.

Dr. Heyward Gibbes moves that the secretary and treasurer be instructed to post on a bulletin board in the Medical Society Hall names of those members who fail to pay their dues by April 1st, amended by Dr. Fishburn that men be given notices by the secretary by the 15th of March. Motion passed.

Dr. Fishburn moves that the men who have been suspended from the society for non-payment of dues be notified and that the secretary ask them back with request of paying their dues stating that the men need the society much as the society need you. The date set for final annual payment March 10. Motion passed.

Dr. Emmett Madden clinical pathological conference: Dr. Emmett Madden presented a very interesting case diagnosing it as probably malignancy of colon. The case was discussed by many members with varying diagnoses but none guessed the true cause of the lethal exodus. Dr. Plowden closed the discussion demon-

strating the pathological specimen of multiple ulcers of the stomach with the rupture of one ulcer about the size of a dime.

22 members present with one visitor. Society adjourned at 10:20 P. M.

Respectfully submitted,
William Weston, Jr. Sec'y.

SECOND DISTRICT MEDICAL SOCIETY MEETING—January 20, 1931. BATESBURG, SOUTH CAROLINA

Program

1. Meeting called to order—Pres. T. A. Pitts, M. D. Prayer.
2. Pneumatocele Cranii—Dr. R. S. Cathcart, Charleston, S. C.
3. Lusus Naturæ. Report of a Case.—Dr. D. M. Crosson, Leesville, S. C.
4. Intestinal Obstruction. Report of an Unusual Case—Dr. Chas. A. Mobley, Orangeburg, S. C.
5. Some Viennese Innovations in Tuberculosis—Dr. Eugene Zemb, Columbia, S. C.
6. Some Errors in Diagnosis with a Report of a Case.—Dr. S. E. Harmon, Columbia, S. C.
7. A Few Remarks on Ano-Rectal Disease.—Dr. F. M. Harmon, Columbia, S. C.

A. T. Moore,
Secretary.

ANDERSON COUNTY MEDICAL SOCIETY

The regular meeting of the Anderson County Medical Society was held at the John C. Calhoun Hotel, Wednesday, January 14th, 1931, 12 noon, Anderson, S. C. The meeting was called to order by the newly elected president, Dr. Frank M. Lander.

The minutes of the December meeting were read and approved.

A letter received from Laurens County Medical Society was read and received as information, stating that Dr. B. O. Whitten, Supt. of the State Training School for the Feeble Minded had made a very interesting talk before Laurens County Medical Society, emphasizing certain measures for curtailing the present increase of mental cases. Dr. Townsend made motion that we invite Dr. Whitten to come before Anderson County Medical Society and make address concerning this matter in near future. Motion seconded and passed.

Report of committee's were called for, Dr. J. R. Young, chairman of the Publicity Committee stated that he had conferred with editor of county paper and publication of pieces in regard to health, would begin

Jan. 18th, 1931. These pieces will be submitted by the three members of the Publicity Committee and any member wishing to submit an article for publication can do so by first conferring with Publicity Committee.

Dr. J. B. Latimer, chairman of Public Health Committee being absent there was no report from this Committee.

Motion made by Dr. J. N. Land, that the Anderson County delegation be asked to appropriate \$7500.00 (seven thousand five hundred dollars) for charity funds for Anderson County Hospital for 1931, also that Anderson County Health Unit be continued as it is at present. Motion seconded and carried.

Dr. T. C. Chachere of Eunice, Louisiana, was a very welcomed guest of the Society, Dr. Chachere expressed his pleasure in being present and gave a short but interesting talk.

Dr. B. A. Henry was in charge of the Scientific Program having as his subject "Medical Economics" which proved very interesting, it being fully discussed by Doctors J. B. Townsend, J. C. Harris, J. R. Young, and J. E. Watson.

Members present, twenty-six—visitors, one.

Society adjourned for luncheon in the hotel dining room.

D. J. Barton, M. D.
Sec'y-Treas.

PROGRAM SOUT CAROLINA PEDIATRIC SOCIETY, COLUMBIA, S. C., JANUARY 14TH, 1931

11:00 A. M.—Meeting called to order.

Case Reports

Dr. R. M. Pollitzer, Greenville, S. C.—"Acute Lymphatic Leukemia"

Dr. Frank Martin, Mullins, S. C.—"Cranial Complications Following Fall in Infants."

Dr. O. B. Chamberlain, Charleston, S. C.—"Juvenile Hysteria."

Dr. T. D. Dotterer, Columbia, S. C.—"Intracranial injuries of the New Born."

Dr. James McLeod, Florence, S. C.—"Gastric Ulcer with Operation."

Dr. C. W. Bailey, Spartanburg, S. C.—"Actinomy
????????????????"

Guest Speaker

Dr. H. H. Casparis, Nashville, Tenn.—"Recent Advances in the Treatment of Infectious Diseases." Report of special committee.

WOMAN'S AUXILIARY

South Carolina Medical Association

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District 8		

this organization we will be amazed at the things we will accomplish. Nothing is lacking except determination.

Watch for Auxiliary News in March Journal. A full account of meeting will be printed. Hoping to meet you in Greenville, May 5, 6, 7, I am,

Yours Sincerely,

Mrs. L. O. Mauldin,
Acting President.

RIDGE MEDICAL AUXILIARY

The Woman's Auxiliary to the Lexington County Medical Association was organized, February 16, 1925, in the office of Dr. W. P. Timmerman, Batesburg, S. C., with six members. Officers were: President, Mrs. W. P. Timmerman; Vice-President, Mrs. J. H. Mathias; Secretary-Treasurer, Mrs. D. M. Crosson. In April 1927, this Auxiliary decided to unite with the Auxiliaries of Edgefield and Saluda Counties as the men's societies had done, calling the organization the Auxiliary to the Ridge Medical Association. Organized with ten members, officers were: President, Mrs. W. P. Timmerman, Vice-President, Mrs. O. P. Wise; Secretary-Treasurer, Mrs. T. G. Asbill.

The Auxiliary meets six times a year in the homes of its members. We have a year book containing programs for the six meetings. At these meetings sketches of two prominent doctors are read; music is rendered, followed by refreshments and a social hour.

In December a beautiful Christmas program is carried out after the business. At this meeting youth is placed to the front. A tuberculosis health bond is purchased at this meeting also.

Once a year the Auxiliary entertains the doctors of the Ridge Medical Association at a reception or a dinner. The Auxiliary raised \$125 for the Marion Sims monument. It gave a linen shower to the Leesville Infirmary. It placed Hygeia in eleven schools. Gave a contribution to the Woman's building at the Tuberculosis Camp in Columbia. Type written sketches of the following doctors or dentists: Dr. Horace Parker (dentist), Medical doctors: Dr. John R. Mobley, Dr. A. R. Able, Dr. J. C. W. Kennerly, Dr. John T. Daniel, Dr. J. J. Buster, Dr. Elbert Bland, Dr. Wm. Butler, Jr., Dr. M. W. Abney, Dr. J. L. Adams, Dr. Wm. Coleman, Dr. John B. Abney, were sent to Mrs. Stuckey of Sumter in compliance with the State President's request.

Dear Auxiliary Members:—

Already, we are spending more and more time planning for the days ahead. I refer to the State Medical Association meeting in May. Our work will not be in vain if you do your part and make every effort to be present and have your Auxiliary represented. Draw a circle now around the dates May 5, 6, 7, and insert Greenville, S. C. Let us make it our aim to have every Auxiliary in the State answer to roll call. There is a great work for the wives of physicians if we will catch the vision and pass it on to those who have failed to be interested. Come to the Greenville meeting whether you are an active member of an Auxiliary or not. You are invited and we believe you will be repaid for coming.

At the meeting of the Executive Board held in Columbia, October 29, 1930 it was unanimously decided that, in order to function properly and get best results, we must have an objective, so we are bringing to the State meeting the following recommendation:

"That the Auxiliary to the South Carolina Medical Association undertake the raising of money to be used as an Educational Loan Fund, to be made available for the use of deserving sons and daughters of doctors who are or have been members of the South Carolina Medical Association." This is just one of several recommendations to be brought to you. Think this through and let's do something we will be proud of.

The object of every Auxiliary should fall into three groups, Social, Educational and Philanthropic (and the greatest of these is Educational). The greatest good of an Auxiliary, to my mind, is due to the educational influences it has upon the people of South Carolina and not the amount of moneys collected. Working along legitimate lines, we can be of real aid to the profession as well as to the people in general. If each member will dedicate her services to the growth of

We are planning to make scrap books at our next meeting to be given to a hospital.

Mrs. W. P. Timmerman, President.

Mrs. E. C. Ridgell, Secretary.
Batesburg, S. C.

KERSHAW COUNTY MEDICAL AUXILIARY

The Auxiliary to the Kershaw County Medical Association has been active since its organization. Regular meetings are held and they are well attended. Each year the Auxiliary sponsors the sale of T. B. Christmas seals and feels that this is one of its most important and far reaching activities. The Auxiliary keeps HYGEIA, the Health magazine, in the library. Also the Auxiliary furnishes milk for a pupil in the public schools. These are the outstanding activities in the Auxiliary's health program.

Besides helping their doctor husbands keep their county in good health, the Auxiliary members help them also to enjoy their recreation. An unusually beautiful banquet was given to the Kershaw Medical Association by the Auxiliary. This delightful affair was well attended and thoroughly enjoyed.

When the call came for assistance in erecting the Sims Memorial monument, the Kershaw County Auxiliary gladly raised fifty dollars. Mrs. A. W. Humphreys is president of the Auxiliary to the Kershaw County Medical Association.

TRAUMATIC PNEUMOCEPHALUS

S. W. Miller, R. N. Klemmer and P. O. Snoke, Lancaster, Pa. (Journal A. M. A., Jan. 17, 1931), report a case of automobile injury to the cerebrum with at least temporary infection. Sneezing was a fairly prominent symptom and probably aided materially in the formation of the channel from the rent in the dura through the brain substance to the lateral ventricle. It would seem that the cerebrospinal fluid drained through the fistula in much the same manner that water drains from a narrow mouthed bottle when it is inverted. The important instructive features of the case are four: (a) Increasing headache, in a patient with fracture of the skull, should call for roentgenographic re-examination. (b) Patients with fracture of the skull involving a sinus should be instructed never to blow the nose. (c) Cerebrospinal fistula usually demands operative intervention. (d) The roentgenogram is diagnostic.

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The Journal

of the

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NO. 3

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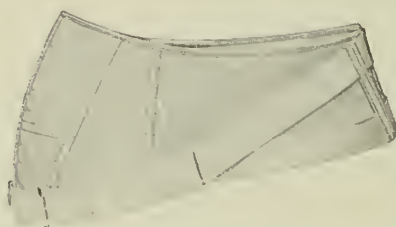
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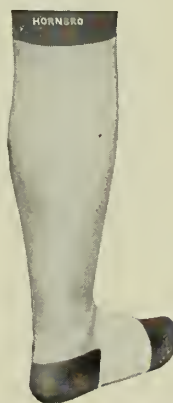
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EDITORIAL

PRESIDENT LYNCH WRITES IMPORTANT BOOK

Elsewhere in this issue will be found some unusually complimentary comments on a book written by Dr. Kenneth M. Lynch, Professor of Pathology, Medical College of the State of South Carolina. In addition to the comments by the writers in our Book Review Department one of the most significant observations appears in the March 7, issue of the Journal of the American Medical Association, the closing paragraph of which is as follows:

"Dr. Lynch is to be congratulated on putting so much practical and needed knowledge in simple language and in so small a compass. For the student, the clinical laboratorian and the internist, his book on protozoic parasitism of the alimentary tract is the only small volume, in any language, that can be recommended."

The whole profession not only in this state but in other parts of the country will view with pride this splendid contribution from the pen of our President.

In looking back over the history of medicine in South Carolina we find many illustrious names and among them several authors of national and even inter-national fame. In recent decades, however, they have been all too few. It is hoped that Dr. Lynch has inspired some return at least of our former prestige in the domain of medical literature. In other fields of literature South Carolina is rapidly coming to the front, why not in medicine? We urge our readers to purchase a copy of Dr. Lynch's book. It deserves the widest possible consideration on the part of everyone who is the least bit interested in the subject of which it treats.

PRESIDENT'S PAGE

BY KENNETH LYNCH, Charleston, S. C.

THE AIMS AND OBLIGATIONS OF ORGANIZED MEDICINE. VI.

Improvement in Hospital Practice

Within a generation the sick of this country have been largely hospitalized. That such an amazing growth has not led to more major unsolved problems than now exist is to the everlasting credit of the Profession. It is at a stage now where every community large enough to exert any collective activity must have its hospital. Fine as this is within itself it is not without its thorny points.

The mere existence of a hospital does not change the calibre of physicians, it only provides for the improvement of their practice and allows them to qualify to care for certain illnesses otherwise uncared for or improperly so or at the disadvantage of transportation elsewhere. The existence of an operating room does not make a surgeon; the equipment of an X-ray laboratory does not qualify a roentgenologist, nor does the presence of a microtome make a pathologist.

Study and experience are the only qualifying factors in the practice of medicine. Regardless of other study the experience necessary to qualify one for efficiency in many phases of medicine can only be obtained and maintained where such phases may be commonly encountered. The larger the center of population, the larger the hospital, the greater the opportunity for experience in the more uncommon things. It is commendable that the physicians who practise in the smaller hospitals should qualify themselves in all of the aspects of medicine with which they will be commonly concerned, but it is just as commendable that they should not hold patients who could better be cared for elsewhere. A recognition of this obligation and necessity should not and will not reflect discredit on the work done there but rather to the contrary.

The control of the kind of work which can and should be done in any hospital is in the hands of the medical staff, supported by certain outside self-authoritative supervisory bodies which have come into existence for the purpose of passing judgment upon the work of hospitals and guiding the development of hospital practice. The quality of the work done in hospitals has improved tremendously within a decade. Outside the part played by the concurrent advances in medicine this has been due in large part to these classifying agencies. It would have been impossible for the local medical staffs in most places to have brought this about without the moral influence of such outside agencies. This influence will continue to uphold the hands of local authorities but most of the progress in hospital improvement from this point will rest upon local staffs. Improvement beyond the minimum qualifications required for general recognition will be because of strong medical influences in the hospital's own staff.

The other thorny side of hospital progress is financial. Hospital growth and the advances of medicine, both of which are costly, make the bulk of what we hear called the increased cost of medical care. This is inevitable and the sooner the Profession sells its acceptance to the public the sooner will the hue and cry about costs die down and the danger to the Profession itself, to its progress and livelihood, be allayed.

It should be a well recognized principle that the operation of any hospital or any medical service of a hospital for profit is incompatible with maintaining that hospital abreast of medical progress. It may be impossible in principle for a hospital to operate within a current budget without being currently deficient in the quality of its service. In the leaps and bounds which medicine takes it may be unreasonable to expect a hospital to keep pace on anticipated needs. For these and other reasons deficits in the operation of hospitals are the rule and are probably natural, if not actually desirable. For these, and other reasons too, the administration of hospitals on ordinary business principles and by lay boards of control is often unsatisfactory and may be fundamentally unsound, in the nature of the case. The governing boards of hospitals should be predominantly medical, with just enough leavening, either within the medical members themselves, or by the attachment of lay members, to maintain the proper business qualities and contacts. We have plenty of business ability within the Profession to operate even big businesses, and it is not surprising to find that the operation of hospitals may be better conducted by doctors than by business men, especially with the usual political entanglements of the latter.

ORIGINAL ARTICLES

*SOME ASPECTS OF PROSTATIC HYPERTROPHY

*By C. Thompson, M.D., The Millen Hospital,
Millen, Georgia*

Hypertrophy of the prostate is a condition found in men usually past 55 years of age. By some, it is considered to be not a disease process, but as natural occurrence and as common as grey hair. The enlarged prostate produces damage and symptoms mainly by interference with the act of urination. The condition is chronic and surely progressive. This progress may be slow or rapid but it is certain. The clinical course of prostatic hypertrophy follows a fairly definite cycle. The usual sequence is (1) a period of increased frequency and difficulty of urination, (2) a period of chronic incomplete retention of urine without distention of the bladder. Usually there is some contraction of the viscus at this stage, (3) the condition then merges into a period of distention and dilatation of the bladder. Often there is intermittent complete retention of urine necessitating the use of a catheter, (4) following this there is a period of complete retention with the constant use of a catheter. Infection, calculi, tumor, and diverticulæ may occur at any stage of the condition.

It is the obstruction to micturition and the complicating inflammation and sequellæ that produce the symptoms of prostatic enlargement. The earliest symptoms are (1) micturition is unduly frequent being worse at night, (2) the stream is slow to start and flows with little force, and (3) there is a tendency to dribble after the act of urination. If no inflammation supervenes these may be the only symptoms until the bladder is so distended from residual urine that the incontinence of retention develops and is the next symptom. One of my cases came complaining of bedwetting.

Considering the cause, the complications, and sequellæ of prostatic hypertrophy, it is readily understood that the symptoms will vary in different cases. What may be the first symptom in one may be a late symptom in another. The frequency of urination may be slight, or it may be so constant that the patient spends almost his whole time day and night voiding urine. Pain may be absent, it may be slight, or it may be extremely agonizing; and is both local and referred. Bleeding is usually a late occurrence. On the other hand a profuse hemorrhage may be the first symptom noticed by the patient.

Distention and dilatation of the bladder with dilatation of the ureters and kidneys may occur when there has been only slight symptoms. This fact is to be emphasized; because late removal of the obstruction to micturition does not remove the damage done by its long duration. I am convinced that generally any case that has reached the stage that he has to have a catheter used at all needs to have the obstruction removed. Many of them urgently need it long before they reach this stage. Because the obstruction and damage is surely progressive, and because the patient is getting older and more unfit to undergo the operation he will ultimately have to have, I am inclined to the early removal of the obstructing prostate. Recently one of these cases asked me if I didn't think he was too old to undergo an operation. I replied by asking if he was too old to want to void urine.

As to the operation, it is immaterial whether one does the perineal or suprapubic operation, just so he executes the technique accurately, and uses adequate means to prevent hemorrhage. I do the suprapubic operation under spinal anesthesia. Spinal anesthesia is used in preference to caudal block with local infiltration of the abdominal wall because spinal anesthesia lowers the blood pressure and there is less bleeding. A careful study is made of each case and suprapubic drainage, when indicated, is instituted for two to six weeks before operation. In the mean time the man

*Read before the Ridge Medical Society, February 16, 1931, Batesburg, S. C.

receives careful preoperative attention and preparation. It has been my experience that these cases have a more severe reaction from this preliminary operation decompressing the kidneys than they do from the subsequent removal of the prostate. However this preoperative decompression is the greatest factor in lowering the mortality of the operation. Furthermore, it is important that it be a fractional decompression because if the bladder is emptied suddenly, it may result disastrously.

To summarize, the early symptoms are frequency of urination most marked at night, slowness in starting the stream with loss of force and dribbling. Because the condition is progressive, and the patient is getting more and more unfit to withstand the operation he will ultimately have to have, the obstruction should be removed early..

MUCOUS COLITIS A MISNOMER

By Hugh S. Black, M. D., Spartanburg, S. C.

Recently there has been more or less discussion about a condition commonly called mucous colitis. Etymologically, the word colitis refers to an inflammatory disease of the colon and in present day medicine it should be applied to only the infectious diseases of the colon, such as tuberculous colitis, amœbic, colitis, bacillary dysentery, balantidium colic chronic ulcerative colitis and chemical ulcerative colitis, which result from the taking of too much arsenic, mercury, lead, etc.

The term mucous colitis and all its synonyms as mucous colopathy, myorrhea, membranacea, pseudo-membranous enteritis, myxomembranous colitis, tubulous colitis, spastic colitis, etc. do not designate colonic disease, per se but rather denotes part of a general bodily state occurring in neurotic individuals. Until a more definite pathologic and clinical evidence of the infectious nature of this syndrome can be advanced, Bergen has suggested such a name as "irritable colon" for he states that this term reveals the fact that the intestinal disorder is only a part of a general disorder and leads one to investigate not only the colonic difficulty but the basic trouble and likewise takes the patient's thought away

from the colon. To me the term "Irritable colon" is most appropriate and to my mind designates a condition resulting from a neurogenic origin just as we have been using for years the terms "irritable stomach" and "irritable bladder" to explain vague complaints seen in neurotic individuals without there being present any pathological lesion of the stomach and bladder. Of course when you tell your patients that they have an irritable colon or irritable bladder, in an irritable stomach resulting from an unstable nervous system, they will not argue with you but in fact will remark, your diagnosis is wrong and, occasionally someone will take exception about it, but if you use the term mucous colitis, cystalgia and gastralgia to explain their complaints, they will go away satisfied and rejoicing, not only because their case has been diagnosed but because it will also give them something to talk about at some bridge party, luncheon, theater party or social gathering. Few, if any, will return for treatment if you punish them by saying they are neurotic.

Munthe in his autobiography of San Michele made much fun of the popularized disease, colitis, which to him was only a word to satisfy the minds of his Rich Parisian neurotic, society women and won for him an immense and wealthy practice.

Victims of this neurosis, present clinical symptoms but all cases complain of the passage of masses of mucus from the bowels usually independent of the passage of feces, though the mucus may be passed just before or just after the fecal passage. Commonly the individual will have a sudden desire to go to the stool and instead of passing feces, will pass masses of mucus which may be soft jelly-like masses, resembling tube-like casts of the lumen of the colon. The mucus is greyish white in color and does not dissolve in water. The passage of mucus is usually in small repeated evacuation with a feeling of tenesmus. At times blood may be present, either bright or altered, but as a rule small amount. When a stool is passed it is small ribbon-like, often fragmented and frequently called lead pencil stool with mucus found before or after the stool.

The attacks of diarrhea or loose stools are

frequently associated or preceded with sharp shooting pains and severe cramps in the middle or lower bowel, bloating, distention with gas and the passage of mucus varying from the size of flakes to tubular casts. On the other hand there may be constipation with difficulty of moving the bowel and when they do move, the stool is hard and then varying amounts of mucus discharges. Practically all of the patients suffer from constipation and recently many of the authorities on this subject support the view that it is of the so-called spastic type. If there is the so-called spasticity present, wouldn't it be better to report the condition as spastic condition of the colon instead of using the term spastic colitis.

According to Barker, the less frequent symptoms are (1) paresthesias, such as numbness, tingling, of burning, of cold, extending from the feet up toward the hip; (2) bradycardia; (3) syncopial attacks; (4) vertigo; (5) transitory diplopias. Localized symptoms are not the rule, for these individual have many other numerous and vague complaints.

It must be remembered that one of the prime functions of the cells lining the large intestines is to secrete mucus and the amount of mucus will vary directly with the amount of intestinal irritations provided, and with the sensitivity of the nervous mechanism involved. In the term mucous colitis or spastic colitis, we deal not with an inflammatory condition of the colon but with a motor and secretory neurosis which is dependent upon an abnormal innervation within the lumen of the digestive tract. This abnormal innervation occurs very frequently in persons of neurotic constituents and are brought on by attacks of over-exertion, emotional disturbances, excess smoking, family quarrels, illness of beloved relations, love affairs that go wrong, business worries and occasionally following recurrent crashes on the Wall Street stock exchange. Barker, Bockus, Band, Wilkinson and others express their belief that this condition is a primary neurosis, while Logan, Bargaen and others agree that these patients have a hyper-sensitive nervous system or a sufferer from chronic nervous exhaustion.

When a patient comes complaining of vague abdominal symptoms or with a previous diag-

nosis of mucous or spastic colitis, one should never conclude too quickly that he or she is a neurotic and make the fatal mistake of overlooking the presence of an organic lesion. A complete anamnesis and a thorough physical examination, including those of the laboratory, stool, proctoscopic, sigmoidoscopic and X-ray study should be done for too frequent malignant disease of the colon, chronic ulcerative, amœbic or tuberculous colitis have been overlooked. On the other hand, many of these neurotics with colonic dysfunctions have been led to superfluous operations. You cannot cure and expect to remain cured an individual by operating for purely a functional condition, nor can you relieve such an individual by local treatments unless you treat the basic background which are in these cases; a hyper-sensitive nervous system or a nervous system, suffering from nervous exhaustion.

From an X-ray standpoint, the "string sign" of Crane has been presumed to be indicative of mucous colitis. The sign consists in a thin line in the roentgenogram along the course of the colon and probably is caused by barium adhering to the mucus in the bowel, yet Bargaen and Weber of the Mayo Clinic, in a large series of so-called mucous colitis cases, have not been able to establish it as pathognomonic evidence solely of colonic disturbance, for they adhere rigidly to the fundamental principle of limiting its diagnostic effects to the roentgenologic demonstration of actual lesion or at least to a specific type of lesion. If these colons with the so-called "string sign" and spastic colon are examined at the operating table, their appearance to the trained surgeon look normal and this finding only goes to substantiate the negative finding previously revealed by proctoscopic and sigmoidoscopic examination.

Bargaen states that in colonic dysfunctions or so-called mucous colitis cases, he found no dependable group of roentgenologic signs present by which genuine colitis is ordinarily identified, for the colon in these cases present a normal appearance in all reports. When the term colitis is modified by such words as spastic or mucous or when the phrase "irritable colon" is used, it is difficult to make a roentgenologic demonstration, not only of the presence of colitis, but spasm is not shown

to be a prominent feature. In these cases where they give a negative roentgenologic report, they mean there is no actual pathological lesion present but they do not imply that the form of colon dysfunction to which the misnomer "colitis" has been applied so freely, does not exist, perhaps as part of a syndrome, but remarks that most roentgenologists are unable to diagnose the appearance of these colons from the normal colon."

Hodges, on the other hand, thinks the radiologist is probably justified in making a diagnosis of mucous colitis when the typical "string sign" of Crane is present, yet he admits that it is a peculiar neurosis or allergic phenomenon and from this statement one would be justified in believing that he did not find any definite organic lesion of the colon.

When the patient consults a physician, he comes to get relief of his symptoms regardless of whether he has an organic or functional disturbance. The treatment, however, for the relief of these dysfunctions of the irritable colon is difficult and no general line of treatment is satisfactory as evidenced by the generous variety of prescriptions employed by many men. Nerve sedatives are of course essential and in those cases where the cramps and pains are severe, heat applied locally is indicated, as well as occasional doses of opiates, Belladonna or some fit derivatives are given to relieve spasm if present and others advocate calcium lactate pergatives, enemata and colonic irrigations are advocated by some,

while others prescribe dietotherapy, hydrotherapy, physical therapy and psychotherapy. In recent years vaccine therapy and desensitization of the colon has been used concerning the dietotherapy. The opinion of the leading physicians in this country advocate bland diet, while in Europe the trend is for course diets.

From the foregoing statements, one has tried to show that the term "mucous" or "spastic" colitis is a misnomer, since there is no real inflammation nor demonstrable organic lesion in the colon, but the term "Irritable colon" should be used to refer to the dysfunctions of the colon found in those individuals suffering from nervous exhaustion and a hyper-sensitive nervous system. It is well to remember that in treating these cases it is better to treat the general debility and nervous exhaustion instead of concentrating efforts on the abdominal complaints.

In closing, permit me to quote from Hurst who recently said in a discussion on colitis: "No diagnosis is made more frequently and with less justification" and he further remarks, "In most cases in which colitis is diagnosed, a name indicating a definite organic disease is given to explain the presence of symptoms which are purely functional and much money and time spent on vaccines, intestinal douches and visits to spas, when nothing more than a little judicious psychotherapy is really required."

References: Frequent statements taken verbatim from the writings of Barker, Bagen, and Webber.

SURGERY

Wm. H. Prioleau, M.D., Charleston, S. C.

INDICATIONS FOR LAMINECTOMY IN SPINAL INJURIES

Seldom does a test give us such definite indication for or against an operative procedure as does the jugular compression test in cases of spinal injuries. Until this was recognized it was a matter of considerable conjecture whether or not to operate in these cases. This test was first described by Queckenstedt and it bears his name. It was first used by Coleman in cases of spinal injury to determine whether or not the spinal cord was sufficiently pressed upon to cause an actual obstruction to the spinal canal. The subject is treated very clearly by Dr. Charles E. Dowman in an article published in the Journal of the Southern Medical Association, July, 1930, pages 607-611.

Pressure on the cord as a result of injury is commonly due to displacement of bone fragments, hæmorrhage, or edema of the cord per se. By neurological examination alone there are no hard and fast rules which will permit one to determine the state of injury of the cord or whether or not it is being compressed. The object of laminectomy in spinal injuries is to relieve pressure, thereby giving the cord a chance again to transmit impulses which may have been interrupted

by the compressing agent. In brief, should there be evidence of compression of the cord we should operate, otherwise we should not. The jugular compression test gives us the most reliable evidence concerning this.

The test is performed by making a lumbar puncture, attaching a glass manometer to the spinal needle, and then compressing both jugular veins. This causes an increase of venous pressure in the skull and a resulting rise of pressure in the spinal fluid in the lumbar region, provided that there is no intermediate obstruction in the spinal canal. Should there be an obstruction, there will be no rise of spinal fluid pressure in the lumbar region.

In cases of obstruction thus determined we may safely assume that there is pressure upon the cord and we should perform a laminectomy. Otherwise we should not operate. It is important that the test be repeated at intervals as conditions might change.

By following this rule we shall operate upon practically all cases in which an operation will be of benefit. We shall operate upon very few cases unnecessarily. We shall deny to only an occasional case an operation which would be of benefit.

The author cites three typical cases to uphold this contention.

PUBLIC HEALTH

By B. F. WYMAN, M. D., Director of County Health Work, Columbia, S. C.

HARD TIMES AND HEALTH

"Clipped"

Although the body social and economic of the United States suffered last year from nearly all the ills a nation is heir to, the individual body enjoyed a year of unprecedented health, according to statistics recently issued by a life insurance company. The death rate (barring suicide) was lower, disease was arrested, and general well-being was at its best. But only to a limited extent does this happy condition deserve the coinage of a new axiom: "Bad business makes good health," Certain it is, "He that is down needs fear no fall," and once the market touched its obvious bottom, taut nerves were restfully relaxed. Certain it is too, that a number of former white-collar workers were forced to earn their living at whatever manual labor they were able to get, and thus were benefitted by the exercises. But no less certainly other factors contributed to promote national health. For one, the much-maligned drouth. In dry weather, malaria wanes, as do other diseases born of dampness; pest-carrying insects are fewer, and there are more sunny hours for the absorption of healthful rays. Again, the development of preventive medicine must be given a part of the credit, and assuredly praise is due to the increasing scope of public health services.

SOUTH CAROLINA STATE BOARD OF HEALTH DEPARTMENT OF RURAL SANITATION AND COUNTY HEALTH WORK

The chief aim of this Department is the protection of the people in the rural communities of this State. At the present time we have so organized our work that we are giving to our people very definite and active protection against disease and assisting in the promotion of BETTER HEALTH. We have organized our work in twenty-three

counties in our State. The personnel usually employed in a County Health Unit consists of (1) a Director, who must be a qualified physician with knowledge of Public Health work; (2) Public Health nurses; (3) Public Health Inspectors and (4) Clerical help.

This organization functioning as a county health unit may be expected to render the following services to the community, consistent with the personnel employed and the funds available.

1. To teach the people the source of contagious diseases; the principle methods of their spread and the common sense methods of prevention.

2. To prevent the spread of Communicable Diseases.

- a. By locating and isolating the cases, quarantining those exposed and inducing strict bedside precautions.

- b. By general sanitation.

- c. By giving free to all who desire it, typhoid and smallpox vaccines, diphtheria toxin anti-toxin, and pasteur treatment to those who are unable to pay for it. This provision is definitely contingent upon the amount of funds available.

3. To inspect all food manufacturing and vending establishments and enforce State Health regulations pertaining thereto. This refers especially to dairies and milk handlers.

4. To inspect all school houses and other public buildings and secure the necessary corrections relative to heating, lighting, ventilation, water supply and excreta disposal.

5. To examine school children and children of pre-school age for physical defects that interfere with the physical and mental development of the child; notify the parents of the defects found and strive to induce the correction of remediable defects.

6. By aiding with all available resources the reduction of maternity and infancy mortality. This is one of the special features of

our work as these mortality rates of our State are extremely high.

7. To examine for hookworm disease.

8. To maintain a local laboratory for assisting in the diagnosis of tuberculosis, malaria, diphtheria, typhoid fever, intestinal parasites and other diseases.

9. To make sanitary surveys and induce the necessary corrections in water supplies, and methods of excreta disposal, and supervise mosquito and fly control measures.

10. To emphasize to the public through various educational means, such as newspaper articles, pamphlets, bulletins, public lectures and addresses, the necessity of screened homes, safe method of disposing of human excreta, pure water, good food and safe milk.

11. To emphasize the value of periodic examination for adults by demonstration and by all educational means, such as lectures, newspaper articles and pamphlets. These examinations are to be conducted by the family physicians.

THE UROLOGICAL ASSOCIATION OF SOUTH CAROLINA

THE TREATMENT OF GONORRHEA WITH SUMMARY OF 1,000 CASES*

By M. F. Fowler, B.S. M.D., Atlanta, Ga.

The treatment of gonorrhea has played an important role in the origin, development, and practice of urology. Years ago physicians realized that proper treatment of this disease required long office hours, special equipment, and special training. Those interested in genito-urinary diseases began limiting their practice and naturally acquiring more skill in their chosen field until urology assumed a clearly defined scope and urologists attained their present high standard of proficiency.

It is needless to say that in spite of the fact that the management of this disease was our first task, our efforts have not met with success of which we might justly be proud. This possibly explains why some of us feel that we have graduated from the treatment of gonorrhea and further limit our work within the specialty, devoting our time to the more spectacular or strictly surgical phase of urology.

Remindful of the true spirit of the healing art, a physician could not possibly better direct his scientific efforts than in the proper treatment of gonorrhea which affects such a large percentage of the human family. This together with the spread of information on prophylaxis would spare innumerable individuals the humiliation and too often disaster which they least deserve.

Through the efforts of urologists the treatment of this disease has been advanced to a dignified and scientific position, along with other specialties, where it justly belongs. The successful management of gonorrhea requires as much skill as the majority of other diseases and conditions that generally demand

the attention of an expert. The jocular references so frequently aimed at urology are entirely out of place and should be discouraged by the whole profession.

Although we have not found even a near specific for gonorrhea, progress has been made in its treatment. Urologists who have practiced for thirty years or more are impressed by the fact that they see decidedly fewer strictures to a filiform and fewer cases with acute retention due to stricture than they used to. This indicates that the causative infection is being more skillfully managed. The fact that the incidence of gonorrhea is diminishing in spite of the more promiscuous sexual indulgence especially since the World War, is a compliment to the urologist's success in treatment as well as to his efforts in teaching prophylaxis.

There are certain general principles and factors operating in the treatment of gonorrhea that are fairly well agreed upon. Early recognition and treatment are essential to good results. In our practice patients who begin treatment on the first or second day after the onset of the disease, when the first urine is clear or just hazy, are cured in less than half the time required for those patients who delay starting treatment for several days until posterior extension has taken place. The incidence of complications is proportionately less in the group that commences treatment early.

Regular treatment should be insisted upon. The best cooperation of patients is insured by daily office visits. Our records show that patients treated regularly are well in about half the time required for those treated intermittently, and suffer correspondingly fewer complications.

Strenuous physical exercise and exhaustive work should be avoided if possible. Patients who have to exert themselves physically carry the infection on an average of three weeks

*Read before the semi-annual meeting of The Urological Association of South Carolina, Orangeburg, S. C., November 25, 1930

longer than desk workers and are much more liable to develop complications.

The old adage, that "Experience is a good teacher" applies at least in part to gonorrhea. Patients who have suffered one attack present themselves earlier for treatment and cooperate better if they are again unfortunate. The duration of gonorrhea in patients with their first attack is, on an average, twelve days longer and complications more numerous than in patients with subsequent infections.

Gentleness cannot be over emphasized in the treatment of gonorrhea. Too much force in making anterior injections and in irrigating should be carefully guarded against. Doubtless many painful and avoidable complications are produced by rough and meddlesome instrumentation. We should remember that our efforts in combating this infection amount to killing only part of the gonococci with drugs while nature operates as the main curative factor.

The drugs used in the treatment of gonorrhea are many and varied. Probably no other disease has been attacked with such a conglomeration of remedies. Competent urologists use different drugs and varying technic with virtually the same results. So it is evident that the selection of a certain drug from the group of acceptable ones is not of paramount importance. A statement that I once heard a dermatologist use with reference to the treatment of dermatitis applies in general to gonorrhea, "When acute, soothe; and when chronic, stimulate."

As to internal medication, we believe santal oil, methylene blue, pyridium, potassium citrate and hyoscyamus are of some value. Santal oil in acute urethritis seems to have a beneficial effect on the mucous membrane of the urethra and lessens irritation. Methylene blue, potassium citrate, and hyoscyamus are of value in posterior urethritis with frequency and dysuria. Pyridium seems to be an aid in acute posterior urethritis and in both acute and chronic prostatitis.

As an anterior injection the group of organic silver compounds are probably best. We use argyrol in the office but let the patient use neosilvol for the first week or two and protargol thereafter. Acriflavine is a good anterior injection but its use requires a more

precise technic and there is probably more danger of producing complications with it than with the organic silver compounds.

For irrigating, potassium permanganate is probably the safest and most reliable drug. Acriflavine is possibly just as good. Boric acid and silver nitrate have a more limited field of usefulness.

Gonococcus combined vaccine seems to be of definite value especially in the complications of gonorrhea. Aolan and sterile milk injections serve a similar purpose and possibly just as well.

The brief outline of our management of gonorrhea which is to follow is not offered as a criterion, but merely as a procedure which produces most satisfactory results in our hands. We believe that the simplest means and methods of accomplishing the end are best.

Our general instructions to the patient are few and simple. Alcoholic and carbonated drinks are prohibited. Only foods highly seasoned with condiments are omitted from the diet. The patient is advised to refrain from sexual intercourse and violent and unnecessary physical exertion.

The patient with acute anterior urethritis is told to drink water freely during the first several days and avoid constipation. Five minim santal oil capsules, one three times daily after meals, are prescribed for about two weeks. For the first three or four days two anterior injections daily of 10% argyrol solution are given in the office. By that time the inflammation has somewhat subsided and the patient has observed the technic of making an injection. He is then given a two drachm asepto syringe and enough 5% neosilvol to last about a week. Instructions are given for the patient to take an injection morning and evening at home and return to the office once daily, about noon, for observation and the argyrol injection. After the first week or two the patient's home injection is changed to protargol, one-fourth to one-half of 1% solution.

Many patients are cured within a few weeks by this treatment alone. If the anterior urethritis persists for five or six weeks without obvious cause, the prostate is gently examined and the urethra investigated for stricture and

infected follicles. If the meatus is abnormally small, meatotomy is performed provided the urine is reasonably clear. If stricture is found it is dilated every second or third day by sounding the anterior urethra only. Infected follicles are massaged gently against the sound in the urethra. Gonorrhea is frequently prolonged or allowed to progress by delaying too long making the above investigations.

After ten days or two weeks daily potassium permanganate, 1 to 5,000, irrigations are substituted for the argyrol injections. In the uncomplicated cases when the urine is clear with shreds in the first glass, the patient is allowed to leave off one of his injections at home. When the infection is apparently well all home treatment is discontinued but the irrigations kept up for several days before the tests for determining whether the infection is cured, are commenced.

In posterior urethritis with frequency and dysuria, the intake of fluids is restricted so as to give more rest to the parts. Methylene blue, grains two, one tablet three times daily is given. Frequently, as soon as the urine becomes blue the symptoms are greatly improved. Argyrol instillations are substituted for the irrigations. If the symptoms are extremely severe, nothing seems to give relief like irrigating with warm boric acid solution. If the prostate is infected the treatment is the same except for massage every second or third day and gonococcus combined vaccine in increasing doses at two day intervals.

Prostatic abscess is the most painful complication of gonorrhea with the possible exception of arthritis. Large doses of morphine are frequently required to make the patient comfortable. Very gentle prostatic massage even before suppuration has taken place seems to lessen pain and improve the condition. Vaccine is administered every second day in increasing doses. Hot sitz baths lasting from fifteen to thirty minutes are given two or three times daily. Sometimes hot retention enemas seem to give relief. Argyrol instillations or hot boric acid irrigations are the most satisfactory local treatments.

Gonorrheal arthritis is a subject in itself. Briefly, it is treated by completely immobilizing the affected joint or joints by

means of a plaster of paris cast. Vaccine is given at two day intervals. Local treatment of the gonorrhea proper is continued with vigorous attack upon any focus such as an infected prostate or periurethral abscess. As soon as the acute inflammation has subsided from the joint, usually after two or three weeks, the cast is removed and function restored by baking and manipulation of the joint.

Epididymitis is treated by rest in bed, with testes elevated and ice cap applied continuously. Local treatments are discontinued and vaccine commenced. Codein or morphine is given if necessary for pain. As soon as the acute stage is over a suspensory is applied and the patient returned to work. Local treatments are resumed very cautiously.

Infected urethral glands constitute one of our most troublesome complications. Treatment is not as effective as it should be and we are left with more uncertainty as to cure than in any other condition. If the gland abscesses we incise and irrigate the sinus daily with argyrol, mercurochrome or acriflavine. The small infected glands are massaged against a sound in the urethra or cauterized if easily accessible.

In cases that continue to show a morning drop after everything else appears normal, we find pyridium helpful. We also use silver nitrate in the deep urethra either through the endoscope or through the Bangs syringe sound. Of course we massage the prostate, sound and irrigate with silver nitrate or permanganate during the course of the treatment.

After the urine is clear and the patient is apparently well our next and most important duty is to determine whether he is free of infection. We do this by using anterior injections of 1% nitrate silver in an effort to provoke to activity any latent infection in the urethra. The injection is repeated several times at intervals of a few days. To determine whether the prostate is free of infection, the penis is cleansed and the prostate massaged gently but thoroughly. The fluid is examined both in wet and stained smears. This is repeated several times at intervals of a few days. If all these tests prove negative all treatment is left off and the patient told to resume his usual routine of living, except to

avoid exposing anyone to possible infection. We never advise a patient to dissipate as a test, because we believe it unbecoming a physician to encourage practices which so frequently terminate disastrously. After a month the patient returns for a final test as described above, and if negative, he is dismissed. The patients who have had a prostatic infection or infected urethral glands,

we try to follow-up for at least three months after treatments are discontinued, making tests at intervals of thirty days.

In an effort to convey a fair idea as to results obtained by this method of treatment, a thousand consecutive cases that were treated and dismissed as cured were studied. Charts Nos. 1 and 2 accompanying reveal the condensed data and are self-explanatory.

Table #1

333 Consecutive Cases of Gonorrhea in the Male.

333 Faded-out
159 Worthless 29 dissatisfied changed Doctors.
125 Faded of necessity because of work.

1,000 Cases dismissed as Cured.

Cases studied	1,000
Average age	28
Single or married	3 - 713, W - 287
Occupation	Labor 368, Desk 602
Previous attacks	0 - 411, previous Inf. 589
Duration at first visit	Average 14, 2-45, 1 to 7-256, 7-293
Days treated	69 Average
Duration of infection	83 Average
Condition of urine at first visit	C-103, IC-599, BG-307
No. days anterior injections was used	Average 10 1/2
Posterior urethritis	609
Infected prostate	479
Prostatic abscess	9
Epididymitis	1-67, R-35, Both-1
Arthritis	24
Stricture	64
Infected urethral glands	44
Lymphadenitis	18
Gonorrheal Ophthalmia	1
Coexisting stricture	19
Coexisting syphilis	49
Treated regularly or intermittently	R-733, Irrag.-267
Days disabled	1149 - Average 1 1/10 days
Follow-up	30-211, Less than 30-89

	Occurrence, Influence on duration & complications.				Previous attacks, Influence on duration & complications.				Influence of regular treatment on duration & complications.				Comparison showing importance of early treatment.				Comparison as to condition of urine at first visit.			
	L	D	O	1+	Reg	1+ reg	2-	3-	to 7	7+	C	1C	BC							
No. of cases	398	602	411	589	733	267	451	256	293	103	599	307								
Duration at first visit.	16	12	17	10	11	17	1	5	19	1	5	17								
Days treated	79	63	72	57	57	108	61	74	101	37	73	102								
Duration of infection	95	75	89	77	68	125	62	79	120	38	78	117								
Gonorrhoeal Ophthalmia	1	0	1	0	1	0	0	0	1	0	0	1								
Infected prostate	230 60%	262 43%	267 65%	274 43%	319 43%	312 80%	143 32%	122 47%	273 92%	9 9%	210 35%	273 88%								
Prostatic abscess	5 1.3%	4 .7%	5 1.2%	3 0.5%	9 1.2%	0 0%	0 0%	1 .02%	9 3%	0 0%	0 0%	9 3%								
Epididymitis	53 13%	47 8%	60 14%	38 6.4%	60 8.1%	38 17%	20 4.5%	17 7%	61 28%	5 5%	29 5%	60 18%								
Arthritis	9 2.2%	15 2.4%	17 4%	8 1.3%	16 2.2%	8 3%	6 1.3%	6 2.4%	11 3.7%	0 0%	14 2.3%	10 3.2%								
Stricture	41 10%	18 3%	24 6%	45 7.6%	30 4%	37 13%	16 5.6%	8 3.8%	41 14%	0 0%	32 5.2%	32 9.5%								
Infected urethral glands	25 6.3%	20 3.3%	15 3.7%	26 4.2%	26 3.6%	19 6%	9 2%	10 4%	21 7.1%	1 1%	28 4.5%	14 4.5%								
Lymphadenitis	0	6 .1%	5 1.2%	4 .68%	7 .7%	0	0	2 .5%	5 1.7%	0	3 .5%	4 .7%								
Days disabled.	1.3	1	1.7	.6	.5	2	.5	.6	2.1	.18	1	1.5								

WOMAN'S AUXILIARY

South Carolina Medical Association

OFFICERS

Acting President, Mrs. L. O. Mauldin	Greenville
Vice President, Mrs. Carl B. Epps	Sumter
Recording Secretary, Mrs. C. W. Evatt	Greenville
Corresponding Secretary, Mrs. L. H. McCalla	Greenville
Treasurer, Mrs. J. W. Bell	Walhalla

COMMITTEE CHAIRMEN

Publicity, Mrs. W. C. Abel	Columbia
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Hygeia, Mrs. J. R. Miller	Rock Hill
Legislative, Mrs. M. L. Parler	Wedgefield

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District 1. Mrs. W. W. Wild	North Charleston
District 2. Mrs. Ernest Cooper,	State Park, Columbia
District 3.	
District 4. Mrs. F. G. James	Geer
District 5. Mrs. A. W. Humphries	Camden
District 6.	
District 7. Mrs. D. O. Winter	Sumter
District 8.	

PANORAMIC VIEW OF THE WOMAN'S AUXILIARY TO THE A. M. A. IN FOUR ARTICLES

2. North Central States

Mrs. James Blake

According to the Constitution and By-laws of the Auxiliary to the American Medical Association the Organization program is carried on by the active work of the Vice-Presidents. Mrs. Southgate Leigh of Norfolk, Va., is first Vice-President and automatically Chairman of Organization. Due to her location on the map the Second Vice-President finds herself interested in the destinies of the North Central group of states.

Looking backward, with pleasant memories to Detroit, and forward with delightful anticipations to Philadelphia, we find this group of states all doing something of common interest.

In the January Journal of the Indiana Medical Society, the Auxiliary President stresses the importance of more constructive work on the part of her organized County groups. "Physicians' wives," she says, in her New Year's Address, "hold an enviable position in being privileged to have a part in a world wide health program, and I would urge every physician's wife, to bring before other women dependable knowledge, and a just appreciation of the real spirit and purpose and actual achievements of the medical profession." So from Indiana we know we are to have constructive work during this year. Physicians as a class are not prone to participate in legislative matters but when four distinctly separate bills, which affect the profession, directly, are presented during one session of a State's Legislature, it is time to be up and doing.

Such is Indiana's situation this year and the doctors of the 7th district have thought it worthwhile to

instruct their Auxiliary members on these subjects that their influence may be properly used. The Indiana Journal never fails to give the Auxiliary space, and it is little wonder the Indiana women are up and coming, when they have such Editorial Notes to enlighten and guide them in their constructive Program work, as one finds in this same Journal.

Kansas is slowly getting a few things accomplished. A world wide depression has rendered prophets quite fameless abroad as well as at home, but the Doctor's wife in Kansas is coming into her own, and we prophesy that the Auxiliary will climb to the top due to the indomitable spirit of the leaders in that state.

In Illinois the motto might well read—"Builders we are, and builders we must ever be. Builders, not in stone that shelters life, but builders in life." We find good constructive programs of well-balanced educational value, we find a Journal ever ready to broadcast Auxiliary news, and best of all we find a healthy Organization line-up, and an Advisory Board from their Medical Society. Several of their County groups are having their members get busy with the "Health Audit Program."

One project of worthy mention comes from Vermillion County on the Eastern boundary of the state. The County Auxiliary put on the Health Institute in Danville last November. A member from every agency in the county working out any kind of a Health program, was included in the personnel of speakers. It was for just one day, but it was worth 365 as a rouser for Auxiliary work. It really was sort of a Christmas Seal Campaign opening, a get together of Club Women, and P. T. A. groups in the County. And what a wise idea for a Medical Auxiliary to have the head lines in the plans for such a "Health Day."

Wisconsin, Iowa and South Dakota are among the latest States to join the National Auxiliary. Organization is the key note for their work, and the National Study Envelopes are offered as program material. Right now if the modern Doctor's wife needs to get one thing more than another from her organization, it is the knowledge of what is going on in this world; especially the world of Medicine. Women are discriminating more carefully in the clubs they are joining. They are asking what membership will mean to them what they will get out of it. For that reason the subjects for study should be more carefully chosen, and the roll call should be made to count for something more than jokes and quotations from forgotten poets. It isn't a pleasant feeling for a busy mother who rides miles to a meeting to say when it is all over—"I can't say I know any more now than when I started." And so we find these three states getting themselves established on a firm foundation with the National

program envelopes scattered far and wide to aid and encourage Auxiliary members, already in, and prospective members.

Montana and North Dakota are debating pro-and-con but as Mrs. Hoxie said in her Detroit report—"I believe it will be a mistake from now on to organize a new state, unless it appears reasonably certain that there is interest enough among the Doctors who want the Auxiliary, so they will foster and stand back of it." And so we leave Montana half hearted about forming an Auxiliary, and North Dakota in the air.

We find Michigan giving intelligent cooperation with state and county officials. Women like men are interested in the improvement of civic affairs and healthful living and are realizing that they need to be armed with a definite knowledge of health laws and public health practices.

Missouri is in a very healthy condition. We find that Mrs. A. B. McGlothan, the President-Elect of the Woman's Auxiliary to the American Medical Association, will attend President Hoover's White House Conference for Child Health and Protection to be held in Washington, D. C., February 19 to 21. Mrs. G. H. Hoxie the President for last year will also attend the White House Conference.

Mrs. A. W. McAlester tells us, the women of Missouri are finding the Study Envelopes, published by the Education Committee of the Woman's Auxiliary to the American Medical Association, most interesting and instructive. The Studies on "Common Defects in Children," and on "Diphtheria," "Small Pox" and "Typhoid Fever" were recommended by the Department of Health in the Missouri Branch, National Congress of Parents and Teachers for use on Parent-Teacher Programs. Eight hundred copies of each were distributed for use in Parent Teacher Units. Three hundred were requested and supplied for use in Parent Education Classes. Requests are constantly coming in for additional copies of the studies for use by teachers and Parent Teacher Units. The Department of Public Information of the Extension Division of the University of Missouri is including these studies in its suggested programs for clubs in the Missouri Federation of Women's Clubs, and P. T. A. programs. This Department requested back numbers of Hygeia for use in such programs. Three hundred copies of Hygeia were supplied by women in the state and by the circulation manager and are being used extensively in club programs. The Missouri Chairman of Public Relations is planning to have a copy of each of the studies "Common Defects in Children," and "Communicable Disease Control," sent to each county school superintendent in the state. Several of the County Auxiliaries are using the study envelopes in their programs.

Mrs. M. P. Overholser of Harrisonville, Mo., has been appointed chairman of Public Relations in the Missouri Auxiliary. This Auxiliary maintains a scholarship for a medical student, per capita quotas being assigned to each county Auxiliary.

They also have sent in 30% of the total number of Hygeia subscriptions recorded from all Auxiliaries from January 1, 1930 to January 1, 1931. Some County

Auxiliaries provide Hygeia for all their teachers. Among these are Buchanan, Gentry and Lafayette. Cape Girardeau County Auxiliary has just finished paying a \$1000.00 pledge to a hospital in the city and is now ready for another kind of work. They are a live group and certainly work hard to be able to accomplish so many wonderful worth while things.

Minnesota the North Star State, has had a busy and successful year on organization. The President and Organization Chairman have visited over the state and planned meetings and Educational programs with many County Groups. In October the International Medical Assembly met in Minneapolis, and at this time the Hennepin County Auxiliary celebrated its twentieth Anniversary by being hostess for five days to the visiting Doctors' wives. A great many social affairs and an Educational Day, which included a speaker on Public Health, were features. Hennepin County is having a year with a definite program. Each month a speaker is scheduled, and one meeting during the year is reciprocity day and each Auxiliary in the state is invited to send visitors. This group features Philanthropic work for T. B. patients at Glen Lake and do much for the Library at the Sanatorium. They have helped the Medical Society furnish their Library and Club Rooms spending \$1000.00.

Ramsey County does much the same work. They have a Scholarship Fund for Medical Students. St. Louis County is noted for work in the Public Relations Field. The State Medical Journal gives a page to Auxiliary news. One of the other Counties takes care of a Nurse's Scholarship. The Minnesota Auxiliary has a splendid Advisory Board and a page in the State Journal. The President will be one of the speakers on the program for the Annual Conference of Secretaries of the Component Societies of the Minnesota State Medical Association, to be held in St. Paul the first week in February. This is the first time the Auxiliary has been asked to take part in this Annual affair. Mrs. Hesselgrave's talk will be, "Uses of the Auxiliary."

And so in closing my review of the work of the North Central Group of states may I say again—

Builders we are, and Builders we must ever be

Builders not in stone that shelters life, but

Builders in life itself—ever remembering the future of the world for generations to come depends upon what we think and will and do today.

MISS TIMMERMAN BRIDE ELECT HONOR GUEST AT RIDGE MEDICAL AUXILIARY MEETING

The Ladies Auxiliary of the Ridge Medical Society met at Mrs. E. C. Ridgell's, February 16, 1931.

Mrs. E. C. Ridgell and Mrs. O. P. Wise, of Saluda, were joint hostesses to the Ridge Medical Auxiliary

at the home of the former Monday evening, where Miss Elizabeth Timmerman, bride elect, was honor guest.

Beautiful camelia japonicas and daffodils decorated the home.

After the business was disposed of Miss Timmerman rendered two piano solos, Mrs. Wise gave a sketch of the life of Dr. Crawford Long, who discovered ether

as an anesthetic, and Mrs. W. P. Timmerman read an instructive paper on the diphtheria antitoxin.

The Auxiliary presented Miss Timmerman with a silver bonbon dish.

Refreshments were served.

As a special work the members of the Auxiliary are working making indestructible scrap books for a hospital children's ward.

SOCIETY REPORTS

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, JANUARY 13th, 1931, at 8:30 o'clock

The meeting was called to order by the President, Dr. J. Sumter Rhame.

Present: Doctors: A. E. Baker, Jr.; B. R. Baker; Banov; Beach; Beckman; Burn; Byrnes; Cain; Cathcart; Chamberlain; Deas; Hope; Jenkins; F. B. Johnson; Lynch; McCrady; McInnes; O'Driscoll; F. R. Price; Prioleau; Ravenel; Rhame; Richards; Rutledge; Sams; W. A. Smith; W. H. Speissegger; Sughrue; Taft; Waring; Whaley; Wild; I. R. Wilson; I. R. Wilson, Jr; R. Wilson; Huggin. (56)

The minutes of the meeting of December 23rd were read and confirmed.

The letter of application for membership in the Society of Dr. C. B. Woods was read, and referred to the Board of Censors.

Dr. P. M. Huggin was unanimously elected a member of the Society.

The following report was submitted by Dr. K. M. Lynch, Chairman of the Committee on Public Health and Legislation, to which Committee was referred the matter recently brought to the attention of the Society through the Board of Commissioners, concerning the orthopedic work now being done under the direction of the State Board of Health.

The Committee on Public Health and Legislation, upon investigation of the State appropriation for the rehabilitation of crippled children, find that the State appropriated last year \$12,400.00 to the State Board of Health for this purpose. The work is under direction of the State Orthopedic Surgeon (Dr. W. A. Boyd, of Columbia), elected by the Board of Health. An Assistant Orthopedic Surgeon receives \$2400, a nurse \$1800 and the remainder is spent for travel and hospital expenses of poor children, and no part of the appropriation may be used to pay for the services of physicians or surgeons. Before any child may receive benefit from the appropriation there must be filed with the State Board of Health affidavits from the County Treasurer of the child's home county and two reputable physicians setting forth the inability of those responsible for the child to pay for such service. Most of the money is spent in Columbia.

It is recommended that the State Board of Health be requested to undertake to obtain an increase of this appropriation in order that it may be sufficient to divide for equal distribution to three districts, centered at Columbia, Greenville and Charleston, for the continuation of this work in those centers.

Kenneth M. Lynch,
Chairman.

It was moved, seconded and carried that this report be received as information.

The Secretary read the following letter from the Laurens County Medical Society:

Dec. 11th, 1930

Dear Secretary:

At the September meeting of the Laurens County Medical Society, Dr. B. O. Whitten, Superintendent of the State Training School for feeble-minded, made a very interesting talk on certain phases of Mental Diseases, emphasizing certain measures for curtailing the present increase of mental cases. He stated that each year there are 400,000 mentally deteriorated patients treated at state institutions in the United States, which necessitated the annual expenditure of the staggering sum of \$100,000,000.00 annually. This does not include the mentally deteriorated ones escaping treatment and treated at private institutions. He discussed at length sterilization in the management of these cases, stating that in years to come this method would very appreciably reduce the number that are totally dependent on the State. He further stated that already 24 of the 48 states in the Union have laws allowing Eugenic Sterilization in these cases and he feels that it is high time South Carolina was falling in on the right side in this progressive movement, which has for its ultimate end—the reduction of the number of feeble-minded in our country.

It was the unanimous vote of the Society that the Secretary write the Secretary of every Medical Society in the State, giving them a gist of Dr. Whitten's talk. So this is to ask that the members of your Society consider this important subject with a view of introducing a bill at the next meeting of our Legislature. Please let us know at your earliest convenience how your Society stands on this subject.

Thanking you in advance, I am

Faternally yours,

R. L. Martin, M. D., Sec'y
Laurens County Medical Society

It was moved, seconded and carried that the Society endorse the movement set forth in this letter.

Dr. P. M. Huggin was presented to the Society and signed the Constitution.

Special Order of business was then taken up. This consisted in the report of the Board of Finance. Dr. R. S. Cathcart, Chairman of the Board of Finance, submitted the following:

January Twelfth
Nineteen Thirty-one

To the President and Members of the
Medical Society of South Carolina
Gentlemen:—

The Board of Finance beg leave to submit this, their annual report.

We are charged with the audits of the books of all officers and committees having charge of receipts and expenditures of all monies for the Society.

According to our custom we have had a certified audit of the books of the officers and committees and submit, with this, as our annual report, the certified reports of the Auditor, as follows:

An audit of the books of the Board of Finance;

An audit of the books of the Committee on Ross Estate;

An audit of the books of the Treasurer of the Medical Society;

A report regarding the Minute Book of the Secretary of the Board of Finance.

Respectfully submitted,

G. McF. Mood, M. D.

Edward F. Parker

R. S. Cathcart, M. D.

Chairman

J. S. Rhame, M. D.

Pres. Ex-officio.

Dr. Edward Rutledge requested information of the Chairman as to whether or not the Keitt Bequest had been entirely reimbursed. The Chairman replied that this Bequest has been reimbursed and they are now reimbursing the King's Daughters Fund and it is hoped by the Board of Finance that it will not be long before the Roper Fund be re-established. It was moved, seconded and carried that the report of the Board of Finance be received as information, spread on the minutes, and that the Committee be thanked for the excellent work they have done during the past year.

The Scientific Program was called at 9:00 P. M.

This consisted of a joint paper on Pulmonary Asbestosis, by Doctors W. A. Smith and K. M. Lynch. There being no further business, the meeting adjourned.

W. A. Smith, M. D.
Secretary.

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, JANUARY 27th, 1931, at 8:30 o'clock.

The meeting was called to order by the President Dr. J. Sumter Rhame.

Present: Doctors: A. E. Baker, Jr.; B. R. Baker; Beach; Bowers; Burn; Byrnes; Cain; Chamberlain; Deas; Hiott; Jackson; F. B. Johnson; Lynch; McCrady; Mitchell; O'Driscoll; Palmer; F. R. Price; Prioleau; Ravenel; Rhame; W. M. Rhett; Richards; Rutledge; Sughrue; Taft; Waring; Whaley; I. R. Wilson; I. R. Wilson, J.; R. Wilson. (31)

Guests: Captain J. F. Murphy; Lieutenant Commander H. M. Stenhouse; and Lieutenant W. P. Stephens, of the U. S. Navy; and Dr. W. A. Black, of Beaufort; Dr. C. B. Woods.

In the absence of the Secretary, Dr. Olin B. Chamberlain acted in this capacity.

The minutes of the meeting of January 13th were read and confirmed.

The Board of Censors having reported favorably on the application of Dr. C. B. Woods, election was held and Dr. Woods was unanimously elected. The President directed the Secretary to inform Dr. Woods of this fact and to ask him to be present at the next meeting in order that he might sign the constitution.

The President stated that it was his sad duty to announce the death of Dr. J. Mercier Green, who was at one time Vice-President of this Society. On motion, seconded and carried, the President was instructed to appoint a committee to draw up resolutions in respect to the memory of Dr. Green. The Chair appointed the following committee: Dr. A. E. Baker, Dr. J. J. LaRoche and Dr. J. H. Cannon.

The Scientific Program was called at 9:00 P. M.

Dr. R. L. McCrady reported a case of ruptured ectopic pregnancy. In this case he used the blood found in the abdomen for intravenous transfusion. This was discussed by Dr. Prioleau and Dr. F. B. Johnson.

D. A. E. Baker, Jr., reported a case of gangrenous colitis with rupture and death in a middle-aged female. This was discussed by Doctors Lynch, Robert Wilson and Prioleau.

Dr. Henry Deas reported a case of multilocular cyst of ovary, simulating pregnancy.

Dr. R. B. Taft reported the finding of a large calcified mass in the pelvis of a female seventy years of age. This was found in the course of X-ray of the hip. This was discussed by Doctors Lynch, Ravenel, I. R. Wilson, McCrady and Rhame.

There being no further business, the meeting adjourned.

W. A. Smith
Secretary.

**PROCEEDINGS OF THE REGULAR MEETING
OF THE MEDICAL SOCIETY OF SOUTH CAROLINA,
HELD AT ROPER HOSPITAL, TUESDAY
EVENING, FEBRUARY 10th, 1931, at 8:30 o'clock**

The meeting was called to order by the President, Dr. J. Sumter Rhame.

Present: Doctors: B. R. Baker; Beach; Beckman; Bowers; Buist; Burn; Byrnes; Cain; Cannon; Cathcart; Chamberlain; Deas; de Saussure; Jackson; F. B. Johnson; Lynch; McInnes; Mitchell; Mood; O'Driscoll; Palmer; F. R. Price; W. H. Price; Prioleau; Ravenel; Rhame; Richards; Rutledge; Sanders; Scharlock; W. A. Smith; W. H. Speissegger; Sughrue; Taft; Taylor; Van de Erve; Whaley; I. R. Wilson, Jr.; R. Wilson; Huggin; Woods. (41)

Guests: Dr. C. E. Bowman, of Atlanta; Captain J. F. Murphy; Dr. Stenhouse and Dr. Morton, of the U. S. Navy; Dr. Gowers of the Medical College; Dr. Peoples of Bonneau; Dr. P. M. Temples of the Medical College; and Dr. W. A. Black, of Beaufort.

The minutes of the meeting of January 27th were read and confirmed.

The application of Dr. John F. Wieters for membership in the Society was submitted by the Secretary, and referred to the Board of Censors.

Dr. C. B. Woods was present and signed the constitution.

At 9:00 P. M., the Scientific Program was taken up.

Dr. R. S. Cathcart read a brief paper on Pneumocephalus, and reported a case. This was discussed by Drs. Taft, Chamberlain and Robert Wilson.

The President then introduced the guest essayist of the evening, Dr. C. E. Dowman, of Atlanta, Georgia. Dr. Bowman read a very able paper on the "Diagnosis of Intracranial Neoplasms." This was discussed by Drs. Robert Wilson, Chamberlain, W. A. Smith, Van de Erve, and Prioleau, Dr. Dowman closing.

There being no further business, the meeting adjourned.

W. A. Smith,
Secretary.

COLUMBIA MEDICAL SOCIETY

Medical Society Hall, February 11, 1931. Meeting called to order by the President, Dr. James S. Fouche, 8:30 P. M. Minutes of last regular scientific meeting read and adopted.

Clinical case reports: Dr. Allison reported a case of urticaria in a Coker College student that was diagnosed as diabetes. He saw the case several weeks after the onset of illness and the girl had a definite scabies. Dr. Allison thinks that the scabies causing so much mental strain and stress might in turn have caused the diabetes. Dr. Heyward Gibbes in discussing the case said it was probably true diabetes but the skin condition was exaggerated by the presence of diabetes.

Dr. W. R. Barron reported a case of right sided pain in the costo-vertebral region bringing out the value of the uro-selectin. The case was that of gall stones with a silent dead kidney on the right. The

procedure was to leave the latter condition alone and remove the gall stones.

The first paper on the program was: Chronic Exfoliative Dermatitis by Dr. Richard Allison. The second paper was Cancer of the Skin and its Treatment by Dr. Floyd D. Rodgers. Dr. Allison showed a man with chronic exfoliative dermatitis who had improved considerably under treatment with intravenous malarial parasites.

Both papers were discussed jointly by Drs. Harmon, W. R. Barron, Routh, Horger, and Black. Papers closed by Dr. Allison and Dr. Rodgers.

23 members present and 3 visitors.

Meeting adjourned at 10:30 P. M.

Respectfully submitted,
William Weston, Jr.
Secretary.

COLUMBIA MEDICAL SOCIETY

Columbia Medical Society Hall, February 23, 1931, 8:30 P. M. Meeting called to order by the president Dr. James S. Fouche, 8:30 P. M.

Minutes of last regular business session read and adopted.

Dr. W. R. Barron brought up the subject of the dues of Dr. Shayer saying that he had not been practicing for two years but giving his whole time to teaching at the University. Dr. Shayer had overlooked his dues in 1930. The president rules that he pay up 1930 dues and resign if he wishes as a member in good standing.

Dr. Harmon reported for the milk committee saying that the City Board of Health is taking some action and that it is doing good work to eliminate brucella abortans from herds supplying Columbia.

The Clinical Pathological conference case was opened by Drs. DuBose, Jr., Weston, Jr., and Doughty. It was discussed by several members who concurred with the diagnosis of intestinal obstruction in infant of three days. Case was closed by Dr. Doughty giving the operative findings and the pathological specimen presented that of congenital atresia of a portion of the ileum, the entire colon and sigmoid.

Dr. Fouche announced that Dr. Cathcart and Dr. McCrady of the Medical College of South Carolina would be the guest speakers for the first meeting in March.

21 members present.

Society adjourned at 9:14 P. M.

Respectfully submitted,
William Weston, Jr.,
Secretary.

RIDGE MEDICAL SOCIETY

The Ridge Medical Society met February 16, 1931, at 7 p. m., at the usual place with a good attendance of the members and the following visitors named: Drs. N. B. Heyward, S. E. Harmon, G. Lunsford, C. Thompson, and E. P. Taylor.

Dr. A. L. Ballenger reported a case of appendicitis with the unusual preoperative and postoperative conditions and results.

Dr. R. H. Timmerman read an interesting paper on therapeutics which was commended and discussed by Dr. D. M. Crosson.

Dr. N. B. Heyward of Columbia exhibited pictures of diseased stomachs and discussed the various phases with special reference to cancer.

Dr. W. P. Timmerman reported two cases of hemorrhage from the stomach and asked questions as to causes, diagnosis, etc.

He also asked for suggestions as to treatment of aerophagia.

Dr. W. T. Gibson reported a case of mass in abdomen which was operated upon and died. He asked questions regarding abdominal pains, etc.

Dr. S. E. Harmon reported a case of cancer of transverse colon and described method of removal, etc.

He also reported a case of cancer of the stomach, with a condition called "leather bottle" and spoke of pyloric spasm and cardiac spasm.

Dr. C. Thompson discussed cancer of the stomach, hemorrhage, aerophagia, etc.

Dr. Heyward in closing the discussion also discussed aerophagia.

Dr. C. Thompson read a concise but explicit paper on "Prostatic Hypertrophy." He was questioned by different ones as to the best method of relief, anesthetising, etc. Dr. Wise asked why prostatic hypertrophy was greater in whites than in negroes. Dr. Crosson and others asked why the prostate enlarged in old age.

Dr. G. Lunsford spoke humorously of the menopause or change of life in men, which elicited much merriment.

Drs. E. C. Ridgell, R. H. Timmerman, and D. M. Crosson were appointed to present suitable resolutions on the deaths of Dr. J. S. Shuler of Lexington County and Dr. John G. Edwards of Edgefield County.

Dr. W. P. Timmerman was instructed to convey the greetings of the society to Dr. J. W. Geiger of Cayce, who will soon celebrate his ninety-ninth anniversary.

At the luncheon short speeches were made by Drs. Timmerman and Crosson and very pleasing addresses were made by Drs. Lunsford and Thompson of Millen, Georgia.

Our visitors added greatly to our meeting which was an unusually good one.

Our local attendance was extra good.

ANDERSON DAILY MAIL, MARCH 12, 1931

Members of the Anderson county medical association and several visitors from throughout the state and Georgia, had the privilege of hearing Dr. Kenneth M. Lynch, president of the South Carolina Medical association, at the annual meeting held at the John C. Calhoun hotel last night.

The association convened at 7:30 in the ball room of the hotel, where seats for 72 were arranged. First on the program was a delicious dinner during the course of which the Jubilee singers entertained with spirituals and songs of their race.

At 9:30 Dr. Frank Lander of Williamston, pres-

ident of the county association, called the assembly to order and began by introducing as he said: "The three greatest people here tonight, Miss Anabelle Dean, supervisor of nurses of the Anderson county hospital, Mrs. Reese Herron, assistant in the X-ray department, and Dr. Olga Pruitt." Dr. Lander then stated that this was the best meeting the association has ever been able to stage. He expressed gratification at being able to have such a prominent speaker as Dr. Lynch to address them and stated that Dr. Lynch had been so kind as to bring along the president-elect of the state organization and the secretary.

"I think these meetings serve as a means of making our professional lives a little happier," said Dr. Lander. "I think the interest in our work is spurred on by medical meetings." He then introduced Dr. E. A. Hines of Seneca, secretary and treasurer of the state medical body. Dr. Hines made a few brief remarks and, after paying a tribute to scientific interests, he urged that the work be kept up.

Each doctor of the county association was then given an opportunity to introduce his visitors. Quite a number of doctors from different towns in this state and Georgia were presented, as was Dr. Charles A. Mobley of Orangeburg, president-elect of the state association.

Dr. Lander then introduced "the doctor who is the most fortunate of all of us; he never has to save a patient's life; all his patients are dead before they get to him, Dr. Kenneth M. Lynch, president of the South Carolina Medical association, professor of medicine at the College of Charleston, and a specialist in chronic diseases of intestinal infection.

Dr. Lynch expressed his pleasure at being allowed to speak to the organization here, and said that he was more a teacher of medical students than a practical doctor. He said "the members of the medical profession represent the highest order of progressive citizenship." Dr. Lynch also stated that the responsibility of seeing that the medical profession and teaching does not fall down in these times of so-called distress rests upon the doctors of the nation.

"Nobody ever survived trial and profited by it by lying down to it," he said. "Don't let fanaticism interrupt the things which go to advance civilization."

The professor then launched into his medical subject, which was "Intestinal Amaebiasis, Its Diagnosis and Treatment." He expressed the necessity of preventing the 'hand-to-mouth' contraction and spread of disease, 'food and drink' contamination, and these especially in rural districts.

"Many vague and chronic diseases are caused by these means of infection," he stated after finishing with his medical subject Dr. Lynch

praised the local organization and especially Dr. D. J. Barton, "as being a good secretary."

Dr. Lander after the meeting stated that Dr. Kenneth M. Lynch is one of the 'most learned and well voiced men in the medical profession, there are only five or six like him in the United States.'

Among the visitors were Dr. Turner of Greenwood; Dr. Kniffer, of Abbeville; Dr. W. E. McCurry, Dr. B. C. Teasley and George S. Clarke, Hartwell, Ga.; Dr. Stuart D. Brown, of Royston, Ga.; Drs. Jervey and son, Wilson; G. C. Bruce and Carpenter of Greenville; Dr. Brockman of Fair Play, president of the Oconee association; Dr. Maze, Dr. Clay Doyle and Dr. Clinton Merritt of Seneca.

IMPRESSIONS OF THE ANNUAL CONGRESS

The recent Congress on Medical Education, Medical Licensure and Hospitals, while serving as an index of the annual progress and tendencies in medical education, rather left the impression that a new order is upon us.

There appears to be a complete shift in the view point as to the purpose of medical education, and equally so in licensure procedure. The ever widening contact of medical service extending into all branches of industry, in the field of mental hygiene, and preventive medicine in its broadest sense, has developed a new conception as to the proper training of physicians.

Although instruction in the fundamental sciences is becoming more comprehensive, there is less discussion of details and courses of study but more as to the relation of this preparation to future medical service.

Graduate instruction has become an important concern of the medical profession and the proper qualification and regulation of specialists constitutes one of the difficult problems of this period. To what extent this will be controlled by licensure is still an open question.

There is general recognition of the wise step taken by the Federation in accepting the standards of the Association of American Medical Colleges as qualification for the degree of Bachelor or Doctor of Medicine. While reserving for its function the determining of fitness to practice and enforcement of regulatory measures, it should be appreciated that both of these responsibilities are a different proposition from twenty years ago. To regulate with justice between the highly trained practitioner and the one of limited qualifications is becoming increasingly difficult.

The Federation at its executive session adopted a definite policy in regard to basic science examinations. It maintained that graduates of class A medical schools having membership in the Association of American Medical Colleges should not be required to take the basic science examination in the state where application for licensure is made. While recognizing that basic science legislation has a purpose in those states having composite boards of examiners, there is no justice in unnecessarily penalizing the well trained medical graduate by this extra test.

The excellent paper of the Hon. Sol. Ullman, Deputy Attorney General of New York, on the control of the unlicensed practitioners was one of the valuable contributions to the entire program.

The Federation dinner was a happy occasion at which Vice President MacConnell presided in his most gracious manner. The address of President Pinkham fulfilled our highest expectations and will have a distinct influence in shaping the further activities of the Federation.

The Federation occupied three half-day units of the Congress program and it is hoped that the character of the papers presented will justify our being accorded the same privileges next year.

—Federation Bulletin.

BOOK REVIEWS

THE MEDICAL CLINICS OF NORTH AMERICA (Issued serially, one number every other month). Volume 14, No. 4. (Philadelphia Number, January 1931) Octavo of 240 pages with 47 illustrations. Per clinic year, July 1930 to May 1931. Paper, \$12.00; Cloth, \$16.00 net. Philadelphia and London.: W. B. Saunders Company, 1931.

MEDICAL JURISPRUDENCE—A statement of the Law of Forensic Medicine, by Elmer D. Brothers, B.S., LL.B. Member of the Chicago Bar; Lecturer Emeritus on Jurisprudence in the Medical and Dental Departments of the University of Illinois and Lecturer on Medical and Dental Jurisprudence in John Marshall Law School and on Historical Development of the Federal Constitution. Third Edition. St. Louis: The C. V. Mosby Company, 1930.

PHYSICAL DIAGNOSIS, by Warren P. Elmer, B.S., M.D., Associate Professor of Clinical Medicine, Washington University, School of Medicine; Assistant Physician to Barnes Hospital; Physician-in-charge Missouri Pacific Hospital; Consulting Physician to Jewish Hospital, St. Louis. and W. D. Rose, M.D., Late Associate Professor of Medicine in the University of Arkansas, Little Rock, Arkansas. With Three Hundred Thirty Seven Illustrations. St. Louis: The C. V. Mosby Company, 1930.

A MANUAL OF NORMAL PHYSICAL SIGNS, by Wyndham B. Blanton, B.A., M.A., M.D., Richmond, Virginia. Assistant Professor in Medicine, Medical College of Virginia. Second Edition. St. Louis: The C. V. Mosby Company, 1930.

THE SURGICAL CLINICS OF NORTH AMERICA. (Issued serially, one number every other month) Volume 10, No. 6. INDEX NUMBER. (Philadelphia Number—December 1930.) 316 pages with 95 illustrations. Per Clinic year (February 1930 to December 1930). Paper \$12.00; Cloth \$16.00. Philadelphia and London. W. B. Saunders Company, 1930.

ABDOMINO-PELVIC DIAGNOSIS IN WOMEN, by Arthur John Walscheid, M.D., Director of Obstetrical and Gynecological Department of Broad Street Hospital, Director of Obstetrical and Gynecological Department of Pan-American Medical Center and Clinics, New York City; Consultant in Gynecology and Obstetrics to Margaret Hague Maternity Hospital, Jersey City, N. J.; Consulting Gynecologist to the F. Reuter Home, North Bergen, N. J. With Three Hundred y-Seven Illustrations—One Color Plate. St Louis: The C. V. Mosby Company, 1931.

SURGICAL CLINICS OF NORTH AMERICA. (Issued serially, one number every other month.) Volume 10, number 5. (Pacific Coast Number—October 1930.) 271 pages with 136 illustrations. Per Clinic year (February 1930 to December 1930.) Paper, \$12.00; Cloth, \$16.00. Philadelphia and London.

CANCER—ITS ORIGIN, ITS DEVELOPMENT AND ITS SELF-PERPETUATION, The Therapy of Operable and Inoperable Cancer in the Light of a Systemic Conception of Malignancy. A Research by Willy Meyer, M.D., Consulting Surgeon to the Lenox Hill and Postgraduate Hospitals, New York Infirmary for Women and Children, etc.; Emeritus Professor of Surgery, N. Y. Postgraduate Medical School. Paul B. Hoeber, Inc. New York. 1931.

DOCTORS AND SPECIALISTS—A Medical Revue with a Prologue and a Good Many Scenes, by Morris Fishbein, M.D., Editor of the Journal of the American Medical Association and of Hygeia, the Health Magazine. With Illustrations by Dan Layman. The Bobbs-Merrill Company, Publishers Indianapolis.

PROTOZOAN PARASITISM OF THE ALIMEN-TARY TRACT, Pathology, Diagnosis and Treatment. By Kenneth M. Lynch, M.D., Professor of Pathology, Medical College of the State of South Carolina, Charleston, S. C., New York: The Macmillan Company, 1930. Price, Cloth, \$3.75.

The author has been especially interested in the subject of Protozoa found in the human alimentary tract for fifteen years. His scientific investigations in this field are well known to those workers in protozoology who have collected our knowledge of the subject. There are large and exhaustive books available but this is the first publication planned for the student and general practitioner of medicine with which I am familiar.

Actively engaged in the teaching of medical students and also director of the department of pathology in a large general hospital, Dr. Lynch recognized the need of such a book. This monograph is clear, concise and compact. In it is contained all the necessary information for the busy practitioner who does not have the time or desire to wade through a larger volume. By treating the subject in a systematic manner and leaving out unessential details, he has made it readable and at the same time he has told all that is necessary about protozoa.

The book is neat, well arranged and unusually well illustrated. The illustrations were largely

drawn under the direction of Dr. Lynch and serve to bring out essential points in the differential diagnosis of the various types. In the several chapters he has divided his subject into discussions of the history, dissemination and prevention, recognition, specificity and a review of the accepted clinical facts and treatments. The Amœbæ, Flagellates, Ciliates and Coccidia are so treated.

The chapter on the Amœbæ alone is worth the publication of this book. In the southern and western states particularly, there are many men who should find this monograph valuable.

Hugh Smith, M.D.,
Greenville, S. C.

PROTOZOAN

PARASITISM OF THE ALIMENTARY TRACT

published in the March 1931 issue of "The American Journal of Tropical Medicine"

Protozoan Parasitism of the Alimentary Tract. Pathology, Diagnosis and Treatment. By Kenneth M. Lynch, M.D., ppI-X. 1-285. The Macmillan Company, 1930. New York.

One of the most important problems before the medical profession today is the relationship of the various protozoan intestinal parasites of man to disease. While there can no longer be any question of the vast importance of the pathogenic amœbic of man, *Endamœba histolytica*, as a cause of disease in the human host, there is still much question as to the relationship of the various flagellates inhabiting the intestine of man to disease, and the diagnosis of all of the protozoan parasites of the human intestine is still unsatisfactory and demands much more study and investigation before it can be made available to the general profession in the way of reliable and practically useful technique. In this book Dr. Lynch has placed on record his extensive experience with these parasites, and his opinions regarding many of the questions which have been raised regarding their importance in human pathology.

As the author states "It has been planned as a monograph for students and practitioners of

medicine" and "It is not intended for protozoologists, save as a connecting link between their science and medicine." It considers briefly the morphology of the protozoan parasites living in the intestine of man but the work is particularly valuable and interesting in the discussions it contains regarding the relationship, or possible relationship, of the various parasites to disease in man. Regarding the role of *Endamœba histolytica* in human disease the author closes his very excellent discussion of the subject as follows: "We have come, then, from the recent start of knowing amoebic dysentery as the disease produced by *Endamœba histolytica*, to the point where this recognized as the uncommon acute or relatively acute phase of the disease, while there exists in the population at large and incidence of latent infection conservatively estimated at from 5 to 10 per cent, in many, of not all, of which it is the belief of careful and competent experienced men that there is a chronic low-grade disease, of devitalizing quality but diagnosable only on finding the amœbeae." In discussing the possible pathogenic effects of the intestinal flagellates Lynch says: "The problem of the effects of these parasites upon man has reached a stage of **impasse**. None of the class has been shown to be an actual tissue invader or destroyer, none has been shown to produce any substance or bring about any state deleterious to the host. There is no positive direct evidence on the question, it is all clinical circumstantial evidence based upon the occurrence of indefinite symptoms of abnormal states associated with the presence of the parasites."

The sections upon diagnostic technique and upon treatment are well done and the entire work can be recommended to every practitioner of medicine as one which will prove of great value in practice, and the author is to be congratulated upon the production of this very useful monograph. The book should prove of the very greatest value to practitioners in the tropics and sub-tropics.

Chas. F. Craig*

PROVISIONAL PROGRAM GREENVILLE MEETING

MAY 5, 6, 7, 1931

Invited Guests:

The Practical Application of Vaccine Therapy in the Prophylaxis and Treatment of Disease.

By Dr. John A. Kolmer, Professor of Pathology and Bacteriology, University of Pennsylvania, Philadelphia.

Surgical Lesions of the Stomach and Treatment.

By Dr. Dean Lewis, Surgeon in Chief, Johns Hopkins Hospital, Baltimore, Maryland.

Note: These papers will be rearranged on final program.

Symposium on Psychiatry

May 6

Introspection as the Result of Medical Examination.

By Dr. C. F. Williams, Columbia, S. C.

The Mental Conditions Which May Complicate Organic Disease.

By Dr. Olin B. Chamberlain, Charleston, S. C.

The Psychoneuroses.

By Dr. J. M. Beeler, Spartanburg, S. C.

The Treatment of the Infected Cervix—With a Report of a Series of Cases.

By Dr. A. E. Baker, Jr., Charleston, S. C.

Præcox Pubertas in the Child Associated with Malignant Ovarian Tumor—Report of a Case.

By Dr. H. S. Black, Spartanburg, S. C.

Asthma, Hay Fever and other Allergic conditions.

By Dr. F. M. Routh, Columbia, S. C.

Clinical Appraisal of Spinal Anesthesia.

By Dr. J. R. Young, Anderson, S. C.

Two Years Experience With Spinal Anesthesia in General Surgery.

By Dr. George H. Bunch, Columbia, S. C.

Hyperthyroidism Following Thyroidectomy.

By Dr. William H. Prioleau, Charleston, S. C.

The White House Conference on Child Health.

By Dr. D. L. Smith, Spartanburg, S. C.

Neglected Determining Factors in Infant Feeding.

By Dr. William Weston, Columbia, S. C.

Sarcoid of the Skin and Bone Associated with Tuberculosis.

By Drs. J. R. Allison & P. V. Mikell, Columbia, S. C.

Medical Economics.

By Dr. B. A. Henry, Anderson, S. C.

A Discussion of Operations for Senile Cataract with Demonstrations by Moving Pictures.

By Dr. I. Jenkins Mikell, Columbia, S. C.

The aid of Xray films in confirming the diagnosis of chest conditions.

By Dr. W. G. Byerly, South Carolina Sanatorium State Park, S. C.

Symposium Presented by the Urological Society
of South Carolina.

May 7

Obstructive Uropathy

Stones.

By Dr. L. P. Thackston, Orangeburg, S. C.

Strictures and Kinks of the Ureters.

By Dr. W. R. Barron, Columbia, S. C.

Obstructions to Urethras.

By Dr. Milton Weinberg, Sumter, S. C.

Vesicle Neck Obstructions.

By Dr. J. J. Ravenel, Charleston, S. C.

CLINICS

A new feature will be introduced at the Greenville meeting in an effort to hold the attendance to the maximum on the second afternoon Thursday, May 7, by special clinics at the various hospitals as follows:

Shriners Orthopedic Hospital—Clinic conducted by Drs. J. Warren White and T. B. Clegg.

Greenville County Tuberculosis Hospital—Clinic conducted by Dr. Samuel Engle Lee.

Greenville City Hospital—Surgical Clinic conducted by Dr. G. T. Tyler, Jr.

Greenville City Hospital—Diabetes Clinic conducted by Dr. George R. Wilkinson.

GENERAL INFORMATION ABOUT THE GREENVILLE MEETING

House of Delegates

On the night of Tuesday, May 5, the House of Delegates will convene at the Poinsett Hotel. The routine work of the House consists chiefly in hearing reports of the various committees appointed by the President and action on the same. An innovation was introduced last year to attempt to shorten the sitting of the House in order that the members might have more time for rest and recreation by having the Councilors submit their individual reports to the Council itself and any matters of importance so submitted be incorporated in the general report to the House by the Chairman of the Council. Again, the reports of the various committees where possible were submitted in writing to the members of the House before their arrival and the chairmen of the respective committees requested to briefly summarize the original reports before the House. This plan if carried out

again should reduce the time of the session of the House of Delegates to about three hours instead of four, five or six as in previous years. The outlook at the present time seems to indicate that there will be no prolonged discussions over constitutional amendments or other radical changes in the usual routine of the House. The election of officers will necessarily call for the keenest interest of the entire Association and properly so. Very careful thought should always be given to this important matter. Comparatively few changes along this line may be expected as this is somewhat of an off year and the offices to be filled are not numerous. The meeting of the House of Delegates, therefore, bids fair to be efficient and harmonious.

Entertainments

As the years have gone on in the history of the Association there has been a decided sentiment in favor of simple programs along this line. On Wednesday evening, May 6, a dance will be given at the Poinsett Hotel in honor of the President. The Woman's Auxiliary of the Greenville County Medical Society will cooperate in making this occasion everything it should be. In this connection it is highly desirable that the doctors bring their wives and daughters to the convention. The Hotels have been unusually generous in submitting their rates so that the members of the Association may have the pleasure of being accompanied by the ladies of their respective families at a minimum of expense. The city of Greenville is always an attractive place to visit and in the month of May she will be gloriously resplendent in her climatic setting and unsurpassed in the warmth of her hospitality. There should be an attendance of not less than five hundred.

Allied Societies

One of the biggest and most dynamic meetings at the State Medical Association is that of the luncheon at noon Wednesday of the scientific session of the Alumni of the colleges. This event is always looked forward to as an occasion of splendid fellowship.

Woman's Auxiliary

This year the Woman's Auxiliary will have a varied and interesting program of its own, a detailed publication of the same to appear in due time. This is merely to call attention to the unusual opportunity for the ladies of the doctors' family to enjoy a delightful outing.

Public Health Society

The South Carolina Public Health Association has had a phenomenal growth numbering now approximately one hundred members. The attendance this year should be and probably will be the most notable in its history.

HOTEL RESERVATIONS FOR GREENVILLE MEETING, MAY 5, 6 AND 7

The Committee on Hotels of which Dr. George R. Wilkinson of Greenville is the Chairman urges that the members of the Association write immediately to the hotels of their choice for reservations. The hotels will do everything possible to accommodate the doctors and their families but it is highly important that they be notified at an early date as to the number of rooms desired. Greenville is a very busy city and while the hotels are numerous and most excellent the demands from the traveling public are great at all times.

The Poinsett Hotel which will be Headquarters the following are the rates: Single rooms with bath at \$2.50; (2) people to a room—\$2.00 each; and 3 or more people to the room \$1.75 each.

The Poinsett Dining Room is featuring a very high class Dining Room service at popular prices. Club Breakfast at 35c and up. Business Mens' Luncheon at 65c; and a Blue Plate Dinner in the evening at 90c.

The Ottaray Hotel quotes the following rates:

Single, without bath, \$1.50 per person.

Single, with bath, \$2.00, \$2.50 and \$3.00.

Double, without bath, \$1.50 per person.

Double, with bath, \$2.00 and \$2.50 per person.

This particular Hotel states "We believe that we shall be able to accommodate at least one hundred delegates, and we shall be glad to do all that we can to make them comfortable and happy while here."

The Imperial Hotel quotes rates for the Medical Convention, single rates as follows:

Connecting Bath—\$2.00.

Private Bath—\$2.50 and \$3.00.

They will make a special rate of only \$1.00 additional for the wives.

COLUMBIA ABSORBS POST-GRADUATE MEDICAL SCHOOL

The New York Post-Graduate Medical School and Hospital will become a part of Columbia University, July 1, according to an announcement at the annual dinner of the Post-Graduate Faculty Association, January 31. An administrative board of postgraduate studies in medicine, representing both institutions, has been established. Nicholas Murray Butler, president of Columbia University, has been elected a member of the corporation and of the board of directors of the Post-Graduate Medical School and Hospital and becomes an ex-officio president of the medical school. Dr. Arthur F. Chace, president of the Post-Graduate, said that the new arrangement linking the graduate study of medicine with university facilities for research, would make the school the center of a comprehensive program of graduate medical teaching to be sponsored by Columbia. The New York Post-Graduate Medical School and Hospital was founded in 1875 as a department of New York University Medical School, becoming independent in 1882; records show that 27,324 physicians have received instruction at the school.

NUMBER OF PHYSICIANS IN JAPAN

The number of physicians in this country in 1930 is reported to be 48,804, 43,676 of whom are engaged in practice, which is 6.94 per 10,000 people. The proportion of 15,573 dentists to 10,000 people is 2.31, that of 49,399 wet nurses is 7.69, and that of 18,366 pharmacists is 2.92. In comparison with the number year before last, that of doctors is increased by 944, and 2,790 new graduates are expected from medical colleges at the end of March.—Japanese Letter, Dec. 10, 1930.—Jour. A. M. A., Feb. 14, 1931.

A characteristic of Mead's Powdered Lactic Acid Milk No. 1 (containing Dextrin-Maltose) is the finely divided soft curd which never clogs the nipple. In a few moments, any mother can carry out the simple procedure required without error — a saving in time to her and an assurance to the physician that the feedings are correctly prepared. This product never curdles; it is always ready, and quickly reliquefied. No ice is necessary to keep the powder. It is convenient while traveling. Samples and literature on request. Mead Johnson & Company, Evansville, Indiana, U.S.A.

Westbrook Sanatorium

Richmond, Virginia

JAS. K. HALL, M.D.

P. V. ANDERSON, M.D.

O. B. DARDEN, M.D.

J. H. ROYSTER, M.D.

E. H. ALDERMAN, M.D.

Associates

THE SANATORIUM is a private institution with 150 beds, located in the Ginter park suburb on the Richmond-Washington National Automobile highway. Midway between the North and the distant South, the climate of this portion of Virginia is almost ideal. Nearby are many reminders of the Civil War, and many places of historic interest are within easy walking distance.

THE PLANT consists of fourteen separate buildings, most of which are new, located in the midst of a beautifully shaded 50-acre lawn, surrounded by a 120-acre tract of land. Remoteness from any neighbor assures absolute quietness.

THE LARGE number of detached buildings makes easy, satisfactory and congenial groupings of patients. Separate buildings are provided for men and women. Rooms may be had single or *en suite* with or without private bath. A few cottages are designed for individual patients.

THE BUILDINGS are lighted by electricity, heated by hot water, and are well equipped with baths.

THE SCOPE of the work of the sanatorium is limited to the diagnosis and treatment of nervous and mental disorders, alcoholic and drug habituation. Every helpful facility is provided for these purposes, and the institution is well equipped to care for such patients. It affords an ideal place for rest and upbuilding under medical supervision. Five physicians reside at the sanatorium and devote their entire attention to the patients. A chartered training school for nurses is an important part of the institution in providing especially equipped nurses—both men and women—for the care of the patients.

SYSTEMATIZED out-of-door employment constitutes an important feature of the treatment. Wonderful work in the arts and crafts is carried on under a trained teacher. There are bowling, tennis, croquet, billiards and pool.

THE SANATORIUM maintains its own truck farm, dairy, and poultry yards.

Illustrated Booklet on Request

The Journal

of the

South Carolina Medical Association

VOL. XXVII.

GREENVILLE, S. C., APRIL, 1931

NO. 4

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GREENVILLE NUMBER

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The present spectacle of vitamin and irradiation advertising running riot in newspapers and magazines and via radio emphasizes the importance of the physician as a controlling agent in the application of vitamin products. Mead Johnson & Company feel that vitamin therapy, like infant feeding, should be in the hands of the medical profession, and consequently refrain from advertising vitamins to the public.

Westbrook Sanatorium

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OBSTETRICS AND GYNECOLOGY

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The S. C. Urological Society

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PUBLIC HEALTH

B. F. Wyman, M.D., Columbia, S. C.

EDITORIAL

FINAL CALL FOR GREENVILLE MEETING, MAY 5, 6 AND 7

Complete preparations have been made for the Eighty-third Annual Meeting of the South Carolina Medical Association in the fair City of Greenville next month. It is significant that the great epoch of organizing the first House of Delegates took place in Greenville, April 11, 1905, under the Presidency of Dr. Robert Wilson of Charleston. It was there that the Journal of the South Carolina Medical Association came into being. Dr. Wilson was elected first editor, he having recommended the publication of a State Journal in his presidential address. Of the thirty-five delegates at that convention at least fifteen or eighteen have passed to the great beyond. There were less than three hundred members on the rolls of the State Association in that far off day. Many times since then the enrollment has approached one thousand. The publication of a Journal by such a small state was a bold and courageous venture for the mortality of small medical journals

throughout the world had been extremely high. Probably this Journal was the first to be attempted by such a limited membership. The early editors, gave of their best under trying circumstances and set the pace for a creditable organization publication. This status, we believe, has been maintained. In that day the State Board of Health had little consideration from the State authorities as being of any particular consequence. With the inception of the House of Delegates and its influence the State Board of Health gradually has become one of the outstanding Health Departments of the United States. Many other agencies of organized medicine have been promoted to a wonderful degree. The scientific programs then were representative of the best brains of the profession as is the case at the present time, for there has always been an earnest desire on the part of the leading members of the Association that South Carolina medicine should continue to advance with that of the rest of the scientific world. The Eighty-third meeting to be held in Greenville this year, with an attend-

ance of probably five hundred or more, will surely demonstrate by comparison a marvelous change for the better since April 11, 1905, when there was an attendance of about one hundred and twenty-five.

DEATH OF DR. JOSEPH RODDEY
MILLER

In the passing of Dr. Roddey Miller of Rock Hill, the South Carolina Medical Association loses a member who throughout his professional life enjoyed the esteem and confidence of a large number of our members. Dr. Miller had been honored many times by the Association. He rendered a splendid service on the Board of Medical Examiners. He was a strong exponent of preventive medicine, having been the Medical Officer and Chairman of the Board of Health of Rock Hill for twenty-five years. At one time Dr. Miller was honored with the Vice Presidency of the South Carolina Medical Association. He upheld the highest ideals in his daily walk and conversation as a good citizen and a good doctor. He will be tremendously missed at the annual gatherings of the State Association as well as in the Councils of his county and district organizations.

DR. BENJAMIN HIRAM BAGGOTT

As we go to press we learn of the untimely death of Dr. Baggott, one of the most promising of the younger surgeons of South Carolina. Dr. Baggott was not only very active in his profession but in organized medicine and surgery he had been a power of strength in his community. At one time he was Secretary and Treasurer of the Columbia Medical Society and

Treasurer for the past four years. He was formerly Chief of Staff of the Columbia Hospital. His loss will be keenly felt not only by the members of the Columbia Medical Society but by the entire membership of the South Carolina Medical Association. He was sick eight days with lobar pneumonia. Complications set in April 13 with pneumococcus meningitis from which he died, on the following day.

TO OUR ASSOCIATE EDITORS

The unusual interest aside from the program of the State Association meeting of this issue of the Journal revolves around the special contributions of our Associate Staff of Editors. A request was made that they make a special effort to give our readers an important message through their editorials this month. We believe they have done so. They have covered a wide field of scientific medicine both preventive and curative. We wish to pay a tribute to the loyalty of our Associate Staff and to suggest that the members of the Association take the time and trouble to in some way let the various contributors know that their efforts are appreciated. This is as little as we can do for they serve without remuneration. The Journal could not exist without their aid. In passing, our distinguished President, Dr. Lynch, should not be forgotten by our readers for he has contributed a most valuable series of articles month after month with a definite sequence from beginning to end, having in mind the elevation of scientific medicine in our State. We believe that for a long time to come these articles will bear fruit worthy of the splendid achievements of South Carolina medicine.

PRESIDENT'S PAGE

BY KENNETH LYNCH, Charleston, S. C.

THE AIMS AND OBLIGATIONS OF ORGANIZED MEDICINE. VII.

THE DUTY OF THE INDIVIDUAL

The direct objectives of organized medicine are: better medical education, stimulation of research, progress in medical practice, and better public health. The ultimate purpose is that progress in knowledge in the sciences concerned may be furthered and that such advances may be made available and applicable in the prevention and cure of disease.

In working to this purpose every individual member not only contributes but is the recipient of the benefits from the efforts of the whole. Literally we gain by giving, *auget largiendo*. In the workings of organized medicine, therefore, it is not only the duty of every eligible physician to participate, it is to his advantage to do so. In this profession we think and speak much of self sacrifice, we name ourselves—sometimes with quavering voices—altruists. Our orators play upon the emotions with recitations of the ultimate design of the true physician to so control disease as to do away with his very means of livelihood. All of which may be good for oratory but probably fools nobody but ourselves. There may be some emotionalists who are impressed by talk of such extravagant ideals and who may even expect such things to materialize but generally all such claims are beside the mark and to no particular good.

What is more to the point is the realization of the practical advantage to every eligible physician of participation in the every-day activities of organized medicine and in the County, State, Regional, National, and Special Medical Societies. In the first place we need to exercise more care that those who would be members are qualified for the ranks of honest, ethical, and capable physicians. All who do so qualify should be members. Non-membership in organized medicine should be and practically is equivalent to conviction of ineligibility. There are, of course, some qualified physicians outside the fold, but without excuse, much less reason, and they should pay the penalty of classification with the "black sheep."

What is more important, perhaps, is that many who are not qualified are sheltered within the ranks of membership and thereby avoid such conviction. It may be more pertinent that we should clean our own house rather than devoting so much attention to controlling out-and-out quacks. It is an undignified and altogether undesirable spectacle to see reputable medicine contending with charlatanism for prospective patients. When we have said to the public that the attainment of certain educational qualifications and of recognition by the Profession is the minimum requirement for trustworthiness in the physician we can do no more to guide them in the selection of physicians. More than this usually results in the impression of persecution of the outsider and the promotion of his cause.

Participation in the activities of organized medicine is the best assurance of progress in this profession. Leadership in organized medicine goes hand in hand with leadership in medical progress.

To take an active part in the work of the County Medical Society, in the State Medical Association, in medical organizations in general, does not constitute merely a duty which devolves upon physicians but it is the best means of building a place of success in the calling.

THE PLACE WE MEET MAY 5th, 6th, 7th, GREENVILLE AND ENVIRONS

Situated in the apex of triangular-shaped South Carolina, Greenville county has an area of 790 square miles, or 505,600 acres. The county is wedge-shaped, having a length of about 48 miles and a width varying 17 to 33 miles. The northern part of the county is crossed by the Blue Ridge chain of the Appalachian mountains. This section is extremely rugged, mountains rising suddenly from the rolling Piedmont region and some peaks reaching an altitude of more than 3,400 feet. About 100 square miles, or a little more than one-eighth, of the county are classed as mountainous. The city of Greenville has an altitude of 1,040 feet, the highest of any city in South Carolina. Paris Mountain, four and one-half miles from the city, rises to an elevation of 2,054 feet.

Watercourses of County

The high altitude of Greenville County has given rise to numerous rapidly flowing streams most of which flow in a southeasterly direction and empty into Broad River. The Saluda River forming the western boundary, is the principal stream of the county. It rises in North Carolina and drains 300 square miles of that state. Following a southerly course, the Saluda meets the Broad River above Columbia and forms the Congaree River. Some of the waters of the Saluda River spring at an elevation of over 2,000 feet, and at its formation, by the juncture of the South Forks and Middle Saluda, it has an elevation of 900 feet. From that point to the juncture with Broad River the Saluda has a fall of 766 feet with a total drainage area of 2,300 square miles. It is estimated that there are 450 feet of undeveloped fall along Saluda River, much of which could be developed.

Reedy River, a tributary of the Saluda, bisects the city of Greenville. It has a very heavy fall and a drainage area of 386 square miles.

The Enoree River, in its course along the southeastern border of the county, affords the

basis for power at a number of manufacturing plants.

Waterpower represents one of the greatest undeveloped natural resources of Greenville county.

Approximately 37 per cent of the area of the county is woodland. Census reports give this acreage as 180,651. The timber consists of shortleaf pine, oak, walnut, black locust, ash, and yellow poplar.

Climatic

The climate of Greenville is characterized by an abundance of rainfall and a large proportion of sunny days. On the average, there are 220 days a year without killing frost. The annual mean temperature is 59.1 degrees, and the average annual precipitation 53.18 inches. The mean temperature for winter months is 41.9 degrees and for the summer months it is 75.6 degrees. The average date of the last killing frost in the spring is March 29th, and the first killing frost in fall, November 5th. This gives an average growing season of seven months and one week.

Greenville has never experienced a flood or disastrous tornado. The Blue Ridge mountains situated just to the west of the city act as a barrier against violent wind disturbances, while the rugged character of the country and the absence of large rivers preclude the possibility of floods of wide scope.

While year-round residence in Greenville is thoroughly comfortable, it is entirely practicable, owing to the proximity of the mountains, for one to maintain a home for the summer season in the Blue Ridge and carry on his usual business in the city. An hour's ride by motor is all that is necessary to take one from the business section of the city to a summer home 3,000 feet above sea level (Caesar's Head, Elevation 3,227 feet), where there is a difference in temperature of 8 degrees.

Health

With a general death rate (both white and colored) of 15.5 per one thousand of popula-



Birdseye View of Greenville

tion, it will be seen at a glance that Greenville is an unusually healthful community. Both the white infant mortality rate and the general death rate among whites are very low, as compared with cities throughout the United States.

Greenville maintains a thoroughly efficient health department, officered by competent officials. Food, milk, meat, and other supplies are rigidly inspected, as are all hotels, restaurants, cafes, and other places serving food to the public.

Dr. L. L. Lumsden of the United States Public Health Service is credited with having made the statement that Greenville is "the most sanitary city and county in America."

The city of Greenville maintains a large, thoroughly modern public hospital. There is also a modern regional hospital of the Salvation Army maintained in the city, besides several privately owned institutions. Greenville has recently come into possession of a Shrine Hospital for Crippled Children, which is, perhaps, the most modern of its kind in America. The building, costing approximately \$350,000, was made possible by a donation from a Greenville citizen, W. W. Burgiss, who, by the way, is not a Mason. The

maintenance of the institution is the obligation of the Shrine.

Water Supply

In the midst of an 11,000 acre water shed in the Blue Ridge Mountains, 30 miles away, the city has recently completed a gigantic impounding basin with a capacity of nine billion five hundred twenty-two million gallons of water. From this great reservoir, surrounded by virgin forests and fed by scores of bold springs and sparkling mountain streams, water flows down to Greenville through a 30-inch cast iron pipe, affording the city daily supply of eleven million gallons. This is sufficient for the needs of a city several times the size of Greenville.

To provide this remarkable water supply, the city has expended more than \$2,000,000.

Newspapers

South Carolina's leading newspaper—The Greenville News—is published every morning in the year in Greenville. Not only in point of circulation does it lead all other daily newspapers in the state, but it carries the largest volume of advertising and news matter. The afternoon newspaper—The Greenville

Piedmont—is owned and published by the Greenville News. Its coverage is the equal of any afternoon newspaper in the state. Both papers have the full leased-wire service of the Associated Press. The combined circulation of the morning and afternoon papers is approximately 45,000.

Gigantic Sewerage System

In the fall of 1928 construction of the Greater Greenville Sewerage System was completed. The system serves not only the municipality of Greenville, but the industrial and residential sections of the suburbs as well. A bond issue of \$3,000,000 was floated for the purpose of carrying out this great project. Greenville is one of the best equipped cities in this respect in the South.

Hotels

Greenville has four strictly first-class commercial hotels, the Imperial with 250 rooms, the Ottaray with 100 rooms, the Poinsett with 200 rooms, and the Virginia with 54 rooms. Three of these hotels operate dining rooms and are famous for the excellence of their cuisine. Being year-round hostleries, their rates are most reasonable.

Highways

Greenville is at the junction of three Federal Highways, two of which are national arteries of motor travel. The Dixie Highway, known as U. S. No. 25, extending from the Great Lakes region to Florida, passes through Greenville. Here this highway crosses U. S. No. 29, known as the National Highway, which extends from New York to Florida. A third highway, U. S. No. 76, traverses the state of South Carolina from East to West and enters North Carolina near the junction of the states of North Carolina, Georgia and South Carolina. In addition to these great national arteries, Greenville is served by numerous state highways, practically all of which are paved. The following table of distances from Greenville to principal centers will be found useful:

Greenville to Washington.....	541 miles
Greenville to Cincinnati.....	498 miles
Greenville to Jacksonville.....	368 miles
Greenville to Atlanta.....	171 miles

Population

Greenville, according to the U. S. Census of 1930, ranks as the most populous county in South Carolina, the total number of inhabitants being 117,004. During the decade 1920-1930 Greenville county rose from third place in this respect. The increase in population during the 10-year period was 32.2 per cent.

The Census of 1930 reflected population of sub-divisions of Greenville county as follows:

City of Greenville.....	29,148
Metropolitan District.....	63,772
Greenville Township.....	64,995

While statistics for the 1930 Census showing ratio of whites to colored are not yet available, the Census of 1920 revealed that 76 per cent of the population of the county was native white. The foreign-born population is negligible.

The fact that illiteracy among negroes of Greenville county approximates the average for the United States as a whole, and is much better than that for other counties in South Carolina, indicates an excellent type of colored population.

Municipal Government

Greenville's governing body is composed of a mayor and six aldermen, one councilman being elected from each ward. Voting for both mayor and aldermen is at large.

The city has a completely motorized fire department, housed in three stations situated in strategic points about the municipality.

Headquarters of the United States District court for the Western District of South Carolina are maintained in Greenville. The city operates a recorder's court and the county a juvenile court. State, county and magistrate's court are also maintained.

Railways

Greenville is served by the main double-track trunk line of the Southern Railway, extending from New York to New Orleans. The finest passenger service in the South is maintained by the Southern Railway over this line.

The city is also served by three other



A view across the mountains near Greenville
(Taken from the Caesar's Head Road)

railway lines, the Columbia and Greenville division of the Southern, operating between Greenville and Charleston; the Charleston and Western Carolina, operating between Greenville and Charleston; and the Piedmont and Northern (electric) operating between Greenville and Greenwood and Greenville and Spartanburg.

Twenty-four passenger trains operates daily in and out of Greenville, 18 on the Southern, 4 on the Piedmont and Northern, and 2 on the Charleston and Western Carolina.

Greenville to:	Miles	Running Time
New York.....	710	17 Hrs. 30 Min.
Washington.....	484	12 Hrs. 45 Min.
Atlanta.....	154	4 Hrs. 0 Min.
Montgomery ..	328	9 Hrs. 0 Min.
New Orleans ..	448	18 Hrs. 0 Min.

Numerous Bus Lines

Greenville is served by eight bus lines, cars being operated on convenient schedules between:

Greenville and Anderson, S. C.
Greenville and Columbia, S. C.
Greenville and Asheville, N. C.
Greenville and Augusta, Ga.
Greenville and Seneca, S. C.
Greenville and Brevard, N. C.
Greenville and Charlotte, N. C.

At these points connections are made with bus lines operating to various other cities.

Parks and Playgrounds

Greenville is remarkably well equipped with public parks and playgrounds. The city has seven parks, aggregating 329 acres. Six of these parks are for white people and one for colored people. The City Park containing 30 acres and lying near the heart of the city, is the oldest. Cleveland Park, containing 126 acres, is one of the most modern public parks, in this section of the country, being equipped with tennis courts, swimming pools, baseball diamonds and other recreational facilities. The city has set aside 154 acres on Paris Mountain for a suburban park. Mayberry Park, embracing 16, is to be developed for the colored people of the city. Three playgrounds are maintained in the city. The playgrounds are in use the year round.

Clubs

The value of a healthy club life to a community is fully appreciated in Greenville, as is attested by the several flourishing organizations here. Strong units of the Rotary, Kiwanis, Civitan and Lions Clubs are rendering a most commendable service. Greenville also has a splendid Elks Club and the organization maintains an elegant home in a

commodious building near the heart of the city.

The Young Men's Christian Association has a splendid 5-story building, with 28 rooms for the accommodation of young men. The Young Women's Christian Association also has a 5-story building with the same number of rooms for the accommodation of young women.

A thoroughly modern club house, an 18-hole golf course, a swimming pool, and tennis courts are among the attractions of the Greenville Country Club, one of the largest and strongest organizations of the kind in this section. The club occupies a beautiful site on a paved thoroughfare some three miles from the center of the city.

Amusements

In the Carolina, The Rivoli, The Bijou, and The State, Greenville has some of the finest amusement palaces to be found in any city of similar size in the southeast. The Carolina, modern theatre and moving picture palace in one, is generally recognized as the most beautiful and one of the most up-to-date establishments of the kind in the Carolinas and the equal of any in the entire South. The Carolina has seating capacity of 1,218.

While not classed as a theatre, magnificent Textile Hall is equipped with a gigantic stage and all other paraphernalia of a modern theatre. "Road Shows" coming to Greenville are presented in this vast auditorium. Five thousand people can be comfortably accommodated in the great structure.

Furman University's football team, known throughout the country as the "Purple Hurricane," has, by its brilliant record of the past eight years, built up in Greenville and surrounding section an intense love for this popular sport. Manly Field, the name of the University's athletic stadium, has been the scene of some of the most finished brand of football seen anywhere in the South.

Mountain Resorts

The title "The Land of the Sky" has been given to the Blue Ridge Mountains. Some of the most beautiful portions of this enchanting region are to be found in Greenville county. One of the most famous spots is

Caesar's Head, with an altitude of 3,227 feet above sea level. Standing on top of this mountain one is able to see the tall buildings of Greenville, lying 30 miles in the distance. A commanding view of many thousands of square miles of Piedmont country, with farms, factories, and villages, is obtained. There is a sheer drop of 1,200 feet from the overhanging rock forming the "head" to the floor of the valley below. For more than a half-century Caesar's Head has been famous as a summer resort, and through the years has drawn countless thousands from all sections of the South.

Another beautiful resort in the mountains of Greenville is Blue Ridge Forest, centering about famous Hog Back Mountain. Here enormous sums have been spent in perfecting one of the most charming havens in the South. A nine-hole golf course, said to be the highest east of the Rocky Mountains, is one of the outstanding features of the resort. An elegant club house, with all modern conveniences, has been erected atop the highest elevation.

Financial

Greenville is served by five strong national banks. According to the statement of December 31, 1930, the combined capital stock total resources, and deposits of these institutions were:

Capital stock	-----\$	950,000.00
Deposits	-----	\$16,592,142.00
Total resources	-----	\$22,770,262.00

The city is served by six Building and Loan Associations, all of which are in flourishing condition. It is estimated that at least 80 per cent of the homes built in Greenville are financed through the local Building and Loan Associations.

The Textile Industry

Greenville is widely known as the "Textile Center of the South." Within a radius of 100 miles of the city there are 467 cotton mills, with 3,176,638 spindles, 162,118 looms. And 9,361 knitting machines.

With respect to the county of Greenville, the following statistics are of interest:

Number of Textile establishments. . . . 40



Table Rock—near Greenville's new water reservoir

Capital invested	\$35,299,603
Value of products manufactured annually	\$40,000,000
Number operatives employed.....	14,257
Annual payroll of operatives	\$10,000,000
Number of spindles in county.....	776,360
Number of looms in county.....	20,316

More than 4,500 different patterns of cloth are manufactured in textile plants of Greenville county, ranging from heaviest duck and gray goods to the finest of fancy silks and cotton dress goods, voiles, shirtings, gingham, bed spreads, handkerchiefs cloth, etc.

Numerous industries complementary to the spinning and weaving of cotton are to be found in Greenville. Two of the largest bleaching and finishing plants in the South are located here, as well as one of the largest dye plants. Greenville also has a large worsted mill, one of the very few in the South.

Greenville is said to be the only place in the world where cotton can be seen in every process of manufacture from the growing of the staple to the turning out of a finished garment ready for wear. Which means that cotton is grown, ginned, spun, dyed, woven, finished, cut and made into garments ready

to wear—all without the necessity of the product going outside the confines of the county.

Diversified Industries

While Greenville is known throughout the eastern half of the nation for the extent and variety of her textile industries, manufacturing is not confined wholly to cotton. There are in Greenville machine shops and foundries, establishments for the manufacture of loom harness, reeds, shuttles, shuttles blocks, bobbins and other textile equipment; store fixtures, mantels, leather belting, athletic underwear, veneer, concrete pipe, mattresses, peanut products, food specialties, baseball bats, furniture, automobile brake bands, etc. Greenville also has the only packing house in South Carolina, an establishment employing from 75 to 175 persons, and slaughtering some 30,000 hogs per year. The plant has a slaughtering capacity of 125 hogs per hour. It is a complete packing plant, manufacturing lard, bacon, hams, sausage, and all the other products of any modern establishment of the kind.

Churches and Schools

For more than three-quarters of a century Greenville has been known as a religious and educational center. In 1851 Furman University, the South Carolina Baptist denomination's college for men, was removed to Greenville from another part of the state. Soon thereafter the theological department of the University was incorporated as a separate institution and flourished in the city of Greenville for a number of years. This became the Southern Baptist Theological Seminary upon its removal to Louisville, Ky. Furman University has grown steadily through the years, now having a student enrollment in excess of 500 and the largest endowment resources of any denominational institution in the South. The institution was the recipient of a share, amounting to \$2,000,000.00 of the trust fund created by the late Jabes B. Duke shortly before his death. It is a standard A-grade college.

Greenville Womans College, the largest of four Baptist colleges for women in South Carolina, is more than a hundred years old. The student enrollment is in excess of 500. Greenville Womans College also ranks as a standard A-Grade institution.

In Greenville there are two widely known public school districts—the Greenville City School district and the Parker School district. The 1929-1930 enrollment in the city schools was 8,330, while the enrollment in the Parker district was 6,449.

In the city school system there are 13 grammar schools for whites and 5 for negroes. The high school is housed in a separate building which is one of the most complete plants of the kind to be found in the state, costing in excess of a quarter million dollars. A large thoroughly modern gymnasium, with a seating capacity of 1,100 was added to the plant recently.

Parker School district embraces some 14 progressive suburban and industrial communities of Greater Greenville. There is more taxable wealth in Parker district than in any other school district in South Carolina. It also has the largest white enrollment of any district in the state. Full-term compulsory school attendance for children from 8 to 14

years prevails this thruout district. There are 19 grammar schools and one high school in this district. The high school, is in many respects one of the most modern plants in the South. Parker School district is organized on the 6-3-3 plan, the course consisting of six years in the elementary schools, three years in the junior high school, and three years in the senior high school.

There are 93 churches in Greater Greenville, representing practically all the well known denominations.

An Excellent Library

Greenville maintains an excellent Public Library, supported in part by taxation, and housed in a commodious building on the main street of the city. There are 45,000 volumes in the library. It has an excellent reference collection and makes a specialty of books on textile industries.

In the year 1930 the number of volumes loaned for home reading totaled 410,000 the largest circulation of any city in the two Carolinas.

Two auto trucks fitted with book shelves, operate from the library. One circulates in the industrial district and the other in the rural section, each distributing thousands of books in the course of a year. A branch of the library is maintained for the colored people in the Phyllis Wheatley Center and is in charge of a negro librarian.

The library maintains a large reading room, with all the leading magazines and newspapers, and is open daily, except Sundays, from 9 a. m. to 9 p. m.

Agricultural

While cotton is the principal product of Greenville county farms, the soil and climate are adapted to the successful growing of many other crops. The following data relative to agricultural production of Greenville county are from the records of the United States Department of Agriculture:

Number of farms in county	7,594
Percentage of tenants	62.8
Total farm population	37,725
Whites	25,353
Negroes	12,372



Poinsett Hotel

Ottaray Hotel

Imperial Hotel

A Cotton Center

Greenville occupies an exceptionally favorable position for the concentration of cotton destined for the Carolina mills and for export to New England or abroad. Cotton may be concentrated here and re-shipped at the same rate that applies from the point of origin to the ultimate destination. The Greenville warehouses are modern in every respect, with low storage and insurance rates. Many of the largest cotton firms of the country are represented by branches or agencies in Greenville, and there is a very good reason. Greenville is the center of a rich agricultural section, the natural market of a large part of the Carolina crop. This affords the buyer a wide choice of all grades of cotton. The local cotton merchants have the active assistance of the Greenville banks in financing the production and marketing of the crop of this section. It is estimated that Greenville merchants and agents handle a million bales of cotton annually.

Southern Textile Exposition

Greenville is the home of the Southern Textile Exposition, the enormous show which

alternates between this city and Boston. The exposition is held in the Textile Hall in Greenville, where every facility is provided for holding a successful show. The exposition always attracts thousands of visitors from all over the south, north and east.

An Excellent Airport

Greenville has an excellent city-county owned airport, situated three miles from the center of the city. The field is regarded as one of the best lighted south of New York. It is situated on the main southern trans-continental air route, and enjoys double-daily air mail and air passenger service between Boston, New York, Washington, Atlanta, Miami, St. Petersburg, and points west and north-west.

GREENVILLE CITY HOSPITAL

Hospitals are occupying a very unique and important place in the life of every community today. The public is investing money in hospitals for maintenance and upkeep, with the confident expectation that such investments will bring adequate returns in efficient, unselfish nursing service and in competent

medical attention for the sick. This expectation should be met fairly and honestly by hospital executives and by the medical profession as a whole. The public has a right to expect a hospital to be a place where the sick and suffering will find relief and health; a place where high ideals as well as effective sanitation are maintained; and certainly a hospital should be a place where any one may expect to find kind consideration and individual help for individual problems regardless of the social standing of the patient.

In small cities a hospital should become a health unit around which all social agencies for the relief of the poor sick can function well and effectively. This requires proper organization and carefully worked out plans. Most of our hospitals in the South are financially unable to keep up in the way of equipment and furnishings with the larger and more prosperous hospitals of the North and West. We hear so often of very large bequests being made by wealthy families to hospitals (up to this time in the South it is seldom that large sums of money are left or given to our hospitals, and yet all standard hospitals to work efficiently should be endowed institutions.) We know that many of these wealthier hospitals have become excellent institutions. They are setting high standards at which we all may strive to reach. Every little detail becomes a working unit in a very well organized whole. However, it does not take large sums of money nor fine expensive equipment to have a model hospital. Very excellent work is often done in the poorest kind of buildings. If we can have intelligent and high ideals, proper guidance and public interest a splendid organization can grow out of the most dilapidated kind of institution.

The Greenville City Hospital is striving to give to our community such an ideal organization. A great deal of time, thought and effort is being concentrated upon our Training School—as the Training School is the most important half of an efficiently running organization. While our Clinical facilities are not as adequate as is desired for well rounded training for Nurses and Internes; our ambition is to raise our standard of service and nursing so that sick people, who have shunned inadequate medical attention, will seek the

hospitalization we offer. We have raised the minimum age for Students from 18 to 20 years and we are trying to secure young women for Training who have had at least one year of College work. However, a young woman who has character, intelligence, ideals and a sense of the fitness of things will always get first consideration in our Training School.

The Greenville City Hospital wishes to extend to the Members of the State Medical Association a cordial invitation to visit our hospital some time during the meeting of the Association to be held in Greenville in May.

DR. JERVEY'S PRIVATE HOSPITAL GREENVILLE, S. C.

This hospital was first organized in the fall of 1918 and occupied several rooms in the building at 222 N. Main Street. From its beginning, practice in this institution has been limited to eye, ear, nose and throat, bronchoscopy and esophagoscopy. Accommodation soon appeared inadequate and expansion was necessary.

In the summer of 1923 the establishment was moved to its present quarters at 101 Church Street where there is a two story brick structure housing a complete unit prepared to handle any case in the specialties to which reference has been made. The building contains a fifteen bed hospital, with operating room, clinical laboratory, X-ray department, nurses quarters, doctors offices, waiting rooms, and treatment rooms. A special feature is a giant magnet for the removal of magnetic foreign bodies from the eye. This instrument is one of a very few in the South.

The nursing staff consists of a superintendent, Miss Ruby Thompson, who is also an expert anesthetist and who has, with the exception of a few months been with the institution since 1925, an operating room nurse, a floor nurse who is also laboratory and X-ray technician, a night nurse, and a corps of nurses on call for special duty. Miss Louise Martin, who has been with Dr. Jervcy for fifteen years is first assistant at all operations. Only graduate nurses are employed in this institution.

The organization was conducted by Dr.



Shrine Hospital

J. W. Jervy alone until January 1929 since when he has had in association with him his son, Dr. J. W. Jervy, Jr.

The profession is cordially invited to inspect at any time this modern well equipped hospital devoted and adapted to the specialties of ophthalmology and otolaryngology.

SHRINERS' HOSPITAL FOR CRIPPLED CHILDREN, GREENVILLE, S. C.

The Greenville Unit of the Shriners' Hospitals for Crippled Children has now been in operation for three and a half years. It is a sixty-bed institution, located four miles from Greenville on the Spartanburg highway, and is devoted solely to the care of indigent crippled children coming from widely-separated points in the Southeast. It is maintained by a large Masonic fraternity—The Ancient Arabic Order Nobles of the Mystic Shrine.

This institution is the most recent addition to a nation-wide group of hospitals supported by this organization—all devoted to the same purpose. It was located in Greenville as a result of the generosity of Mr. W. W. Burgess,

a local citizen. It was because of his donation that the hospital was located in Greenville. Other localities which had been promised hospitals by the above named fraternity before this one was even considered a possibility, graciously stepped aside.

The wisdom of maintaining a hospital of this nature in the Southeast has been proven by the number of applicants for attention and the distribution of the cases. The children on the waiting list have for the last year or so averaged about two hundred. Over a thousand children have been admitted—64% of these coming from South Carolina, 14% from Tennessee, 7% from North Carolina and Florida each, and the rest (or 8%) scattered among Alabama, Georgia and Virginia. A map at the hospital shows well the distribution geographically. In addition to this, a great many children have been treated as out patients and have never been admitted to the hospital. Over a hundred of this group have come from Greenville County alone.

In addition to the clinics held each Monday and Thursday mornings at the hospital, the surgeon and his associate hold regular weekly clinics at Spartanburg, monthly clinics at

Greenwood, and a clinic every six months at Charleston. The establishment of other clinics in strategic locations in the State, particularly the Piedmont, is being contemplated in an endeavor to facilitate the necessary follow up of the large number of children who have been discharged. No regularly established social worker is maintained by the hospital, but with the help of outside social workers, district nurses, Shriners, and others interested, all the children are closely followed up even after they get over-age.

The staff of the hospital consists of the surgeon and his associate, the superintendent, her assistant, and five other graduate nurses. They are assisted by a corps of fifteen attendants who have about the responsibilities that a practical nurse has in a home. The hospital does not maintain a nurses' training school, but an affiliation with a nearby training school, is being considered. Other employees are a physiotherapist, a chief clerk and her two assistants in the office, and a bracermaker who is also a general maintenance and utility man. The county maintains a school teacher at the hospital so that the children are able to keep on with their school work. Fifteen colored employees bring the total complement up to forty-five.

The surgeon and his associate are generously assisted by a consulting staff made up of physicians practicing in Greenville. These men serve entirely gratuitously and the efficiency of the hospital would be seriously handicapped without their assistance.

The sum of about \$70,000.00 a year is necessary for the upkeep of the hospital—which amount comes from the central treasury controlled by a National Board of Trustees. Of tremendous help has been the assistance received for this Unit from the Duke Endowment which contributes annually the sum of \$1.00 per day for each case. The Board of Governors earnestly hope that the income of the Duke Trustees may be sufficient to continue this help in the future. It will enable this Unit to continue its present basis of work unhampered by a decreasing income from Shrine sources should the shrinkage in fraternalism cause a curtailment. The bulk of maintenance is from money obtained from a \$2.00 annual assessment of all members of

DR. TYLER'S HOSPITAL

Dr. Tyler's Hospital, owned and operated by Dr. Tyler, was opened in the early part of 1913. Except for a short period during the World War, and a fire in 1926, it has been in operation ever since. During the influenza epidemic in 1918, the hospital, with its equipment, was offered to the Greenville chapter of the American Red Cross. It was operated for them by the former superintendent.

The capacity is twelve beds. With rearrangement, a greater number can be provided. It is for surgical patients; although medical and obstetrical cases are taken under the care of their own physicians when there are available beds. The equipment, in addition to the surgery, includes laboratory, X-ray apparatus, and radium. There is no training school for nurses. Dr. Tyler resides in the building.

Since its opening, the hospital has been managed by the same superintendent until her death in 1930.

The policy of the hospital has been to give prompt efficient bed-side care, an excellent grade of food well prepared; and to maintain a quiet, home-like atmosphere.

the Shrine and totals annually a little over a million dollars for the support of all fifteen units. The National Governing Board appoints a local board which is responsible for the proper conduct of the institution, as is the usual Hospital Board of Trustees. The cost per patient per day has averaged just about \$3.00, which takes care of everything.

As has been stated, the purpose of the institution is to furnish orthopedic treatment for those children under the age of fourteen who otherwise could never afford it. The financial status of each case is made a subject of thorough investigation, final judgment being passed on by the local governing board. In addition to the requirement as regards inability to pay, and age, the successful applicant must be normal mentally, and must have a condition that can be materially helped. With the tremendous waiting list that exists—of children who can be definitely helped—it can be understood that the institution can accomplish the most good in treating only



DR. TYLER'S HOSPITAL

Front view (above)

Rear view (below)



those cases where there is a reasonable chance of correcting existing disabling conditions, and converting a child, who otherwise would be a liability to a community, into an asset.

As has been stated, there have been over a thousand admissions since the hospital was opened. Almost an admission and discharge a day has been maintained. The average stay has been calculated to be 70 days, but this includes many serious chronic cases, living at a distance, that sometimes must be hospitalized for over a year. The usual stay is nearer 30 than 70 days if these "long timers" are not counted. 1668 operations have been performed, averaging about forty a month.

Of the cases admitted to the hospital, thirty-two per cent had conditions requiring treatment resulting from infantile paralysis, twenty-two per cent had congenital deformities—over half of which were clubfeet, nine per cent were diagnosed as osteomyelitis, and eight per cent had joint tuberculosis. The incidence of tuberculous spines and hips were just about equal and constituted ninety per cent of the total cases with this diagnosis. Of the clubfeet, over half were bilateral,

bringing the total number of clubfeet requiring correction to a hundred and forty-eight.

Of the sixteen hundred operations, two hundred and thirty-six lengthenings of the tendo achillis were done, and two hundred and sixty-one so-called Hoke stabilizations—practically all of the latter for paralytic feet. Thirty-seven spines have been fused—twenty-one of them for tuberculosis; eighteen hips have been fused—thirteen of them for tuberculosis. The tremendous value of fusions in tuberculous joints has been confirmed by our results. To minimize serious discrepancies in the length of lower extremities, twenty shortening operations have been done and three lengthenings.

A regular weekly program is maintained, which is deviated from only in emergencies. Practically all the active surgical and clinical work is done in the mornings; which, therefore, is the best time to visit the institution. Operating days are Wednesday and Friday mornings, and a formal ward round is held each Saturday morning at nine. Visitors are welcome at any time.

CHESTER COUNTY MEDICAL SOCIETY

The Chester County Medical Society met on Feb. 27, 1931 as the guests of Dr. R. E. Abell at his home on York Street. On this occasion Dr. Abell had as invited guests Dr. Saye of Sharon, Drs. Bratton and Whitesides, of York, Dr. McGill of Clover, Dr. Ed Douglas, Dr. McCants, Dr. Buchanan and Dr. J. E. Douglas Sr., of Winnsboro, S. C., Drs. Poosey and Morrison, of Lancaster, and Dr. Thomas, of Whitmire. After a delightful supper at the meeting was called to order by Dr. J. P. Young, President.

The minutes were read and approved. The Secretary read a letter and questionnaire from the Bureau of Health and Public Instruction of the A. M. A., for the information of the Society. Dr. Abell moved that a committee of three be appointed to formulate plans for action, in the matter of Public Health Instruction for 1931, to be carried out after adoption by the County Society. The President appointed Dr. Abel Chairman, Drs. Hennies and Henry associate members of this committee.

Dr. A. M. Wylie moved we open the floor to any of our guests who might have anything to say for the good of the society. This motion carried. Dr. Whitesides of York told of the work done in Public Instruc-

tion by the York County Society in the way of having talks made over the county on prevention of Pellegria with Dr. Hayne of the State Board of Health as speaker.

Dr. Abell moved that our society go on record as endorsing Dr. Des Portes' reelection as Councillor for the fifth district. Motion carried unanimously.

After the business meeting, Dr. Wallace gave a talk on Meningitis, discussing the diagnosis and treatment and reporting a case of Meningitis following Influenza. In discussing this Dr. Whitesides spoke of the differential diagnosis between Meningitis and Anterior Polio Myelitis and reported a case of Anterior Polio in an adult. Dr. McCants reported a case of Meningitis at Winnsboro without fever.

Dr. Henry reported three cases of vomiting in infants, one due to pylorospasm and Gastric Indigestion, one to Congenital Pyloric Stenosis, one to foreign body in the esophagus.

Dr. Buchanan of Winnsboro reported a case of Hemorrhagic Disease of the New Born, and a case of Post Partum Hemorrhage.

After some discussion of these papers, and social converse, the meeting adjourned.

Pres. Dr. J. P. Young
Sec. Dr. W. J. Henry

ORIGINAL ARTICLES

CHOLESTEROL EQUILIBRIUM IN THE LIGHT OF SOME RECENT STUDIES

By Arthur T. Brice, Jr., B.A., Associate Medical Bacteriologist, U. S. Veterans Bureau, Palo Alto, California

The endogenous nature of cholesterol metabolism in man seems to be firmly established and generally accepted without question. Gardner and Gainsborough (1) have shown that alimentary hypercholesterolemia does not occur as the result of a single meal. The hypercholesterolemia of pregnancy and of diabetes mellitus is also evidence that the metabolism of cholesterol in the human body is endogenous in nature. Chaladow (2) and others have shown by experiments on rabbits that cholesterol is not excreted by the kidneys until after they have been damaged, and, in spite of the fact that Bailey (3), as far back as 1915, pointed out marked differences between the cholesterol metabolism of rabbits and guinea pigs, these findings have been generally accepted as holding true for man and much of the theory of cholesterol metabolism has been predicated on this assumption that the excretory function of the normal kidney does not extend to cholesterol. The hypothesis that cholesterol is formed by the liver and excreted with the bile into the intestine where it is almost completely reabsorbed except for a small amount eliminated with the feces has almost attained to the status of a theory. During recent years Miloslavich (4) seems to have been the only worker who has pointed out that cholesterol may be excreted from the kidneys and who has considered the examination of the urine for cholesterol as a procedure of any practical interest or importance.

I have recently published my findings in a series of eleven hundred and twenty seven valid micropolariscopic examinations of specimens of pathologic urine (5). These indicated an average incidence of doubly refractive lipoids in pathologic urines of all groups of about 15%. The group of 725 specimens from surgical cases is of special interest.

Note: Major Brice was formerly connected with the McLeod Infirmary at Florence, S. C. where the preliminary studies on this subject were conducted in the laboratory there.—Ed.

URINARY LIPOID POSITIVES IN 725 SPECIMENS FROM SURGICAL CASES

Involvement of the Intestine

Gall Bladder Surgery	27%
Salpingectomys.....	24%
Hernias.....	20%
Miscellaneous Laparotomys.....	18%
Appendectomys.....	15%

Average positive for Urinary Lipoids..... 21%

No Involvement of the Intestine

Tumors (Miscellaneous).....	18%
Minor Surgery.....	17%
Thyroid Surgery.....	15%
Genito Urinary Surgery.....	8%
Gynecological Surgery.....	4%
Infections.....	4%
Eye, Ear, Nose and Throat Surgery.....	3%
Kidney Surgery.....	0%
Traumatic Cases.....	0%

Average positive for Urinary Lipoids..... 8%

It has recently been my opportunity, through the kindness of Dr. Wm. H. Wilmer, Dr. Warfield Longcope and Dr. Dean Lewis, to check these findings on two cases of gall bladder disease and seven hernias at the Surgical Clinic of the Johns Hopkins Hospital. Daily specimens from date of admission to date of discharge were examined in each of the cases referred to. Urinary lipoids were found in every case. The gall bladder cases showed double refractive urinary lipoids in 97% of the valid examinations, the finding consisting principally of blastomatous granulo-cellular lipid crystals and lipid epithelium. In six of the seven hernias there was marked displacement of the intestine. In the other case there was severe strangulation and intestinal involvement. This latter case showed lipid bearing round and caudate epithelium as well as squamous cells. There was a concurrent kidney involvement in only one case of hernia and **this was the only case in which the typical lipid granule was not found.** The hernias as a group showed presence of urinary lipoids in 61% of the valid examinations, 14% of this finding representing the typical characteristic lipid granule. Thanks are due to Dr. G. G. Finney, Resident Surgeon, for grading the extent of intestinal involvement in the individual cases.

It would appear from this and the previously reported study that in pathological conditions there may be elimination of lipoids by the kidneys proportional to the extent of the intestinal involvement. In the light of this

knowledge it does not seem out of order at the present time to review somewhat in detail the present status of cholesterol metabolism theory with a view to determining whether certain factors may not have been overlooked.

A survey of the cases studied by Edleman (6), Dyke (7), Brain and Byrom (8), Rachmilewitz (9), and the experiments of Burger and Habs (10), as well as others, inclines one strongly to the belief that a primary disturbance of lipid metabolism may exist as a distinct clinical entity. The authors Rabiner and Keschner (11), even go so far as to state that abnormal lipid metabolism may be a genetic factor in the production of organic nervous and mental diseases, presumably basing this assumption on the facts that cholesterol is one of the primary cell constituents and is present in fairly large amounts in nervous tissue.

Elwyn (12) and others have pointed out that cholesterol in combination with certain fatty acids must be considered as a building stone in the structure of the cells, and that free cholesterol also probably has some definite function in them. We know that in the cell the border region consists of a colloidal combination of proteins with fats, cholesterol esters, phosphatids and metallic ions which influence the permeability of the cell membrane. Elwyn considers that it is possible that in lipid nephrosis certain cells, especially the endothelial cells of the capillaries, "suffer a disturbance in the equilibrium of the various phases which constitute the cell border," as a result of which some of the cholesterol is not properly retained and passes out of the cell and is taken up by the blood. Barring direct physical injury to or bacterial invasion of the cells themselves, the only control mechanism that can be visualized at the present time, the existence of which must be implied if we accept such an hypothesis is a hormonal one. Whether or not the individual cell takes up cholesterol from the blood or releases cholesterol to the blood can be governed only by the presence in the cell, or at the cell membrane, of some other substance.

It is interesting to note that Chamberlain (13) has come to a somewhat similar conclusion by a widely divergent process of reasoning. He states that the fact that the

blood cholesterol of an individual remains remarkably constant in spite of the somewhat coarse mechanism of intake and output suggests "that some finer mechanism is at work." He believes that the spleen exercises a regularity function which controls the level of blood cholesterol. He has demonstrated a marked increase in the storage of cholesterol by the spleen and the liver, but not the suprarenals, of rabbits resulting from the intravenous injection of this substance. (14) In guinea pigs, Sakai (15) has shown that thyroid feeding for six or seven days will cause an increased storage of cholesterol in the liver and suprarenals, but that after splenectomy similar feeding does not produce this result. Randles and Knudson (16) have shown that after the removal of the spleen or of the suprarenals of rats the blood cholesterol levels both on cholesterol free and plus 0.3% cholesterol diets showed no appreciable change within 30 days. In interpreting the results of these and similar experiments it is well for us to bear in mind that marked differences both of rate and manner of cholesterol metabolism in different animals have already been shown to exist, and furthermore, that none of the experiments above mentioned have been controlled by quantitative determinations of cholesterol eliminated in the urine and feces.

The value of adopting an hormonal hypothesis for the control of cholesterol metabolism in man can only be determined by considering to what extent such an hypothesis fits in with all of the observed facts. Such an hypothesis assumes that chemical substances are secreted by certain or various of the organs which through their composition determine whether the substance the equilibrium of which they control is absorbed by the cell or given off by it, as well as at what point or points in the body these transfers take place. The name autocoid has been proposed for such specific secretions, the hormone being the autocoid which excites and the chalone that which inhibits function. As the term hormone seems to be well fixed in general usage to denote the secretion itself, rather than to designate its nature, we prefer to speak of the anabolic hormone as H(a) and the catabolic form of the secretion or chalone as H(k). It is generally accepted that these

active principles are manufactured in the endocrine system and carried by the blood stream to exert an action elsewhere in the body. In the case of cholesterol as yet we see no evidence to indicate any single point of origin. Rather does it appear that in animals the H(a) secretion may originate in either the suprarenals, the spleen, or the liver. The experiments of Bruger and Habs on man in which they found that cholesterol feeding of normals resulted in increased serum cholesterol but that similar feeding of seven patients with liver cirrhosis did not, seem to bear this assumption out in part. The H(a) secretion from other sources than the liver in these cases was sufficient to maintain the normal level of blood cholesterol and tissue cholesterol equilibrium, but not sufficient to enable the organisms to take advantage of the opportunity offered to store cholesterol, a reaction indicated as normal by the rise in blood cholesterol of the non-injured liver controls. The numerous cases of xanthomatosis and hepato-splenomegaly which have been described would seem to be accountable for on the grounds of the action of an excess of the H(a) secretion at the parts affected.

In lipid nephrosis and in its combination forms with nephritis we would seem to be dealing with a chemical state of imbalance of the autocoid itself. Whether from a lack of certain necessary elements in the diet, or from their complete utilization in other processes, or from improper functioning of the generative source the composition of the secretion may have been warped or bent toward the H(k) formula, resulting in the release of cholesterol from the tissue cells to the blood stream and its subsequent accumulation in the kidney. This is the kind of a situation that Elwyn has suggested. We must, however, consider the source of cholesterol in the organism and the uncertainty which exists as to its exact structure. If a rather fixed proportion between ingested and synthesized cholesterol exists in health and the kidney has the function of rectifying slight disturbances of this proportion by eliminating an excess of cholesterol into the urine through the action of a H(k) secretion within the kidney, it may be that the primary accumulation of cholesterol occurs in the

kidney through the failure or lack of this secretion, rather than to its excessive action at the tissue cells. It is interesting to recall in this connection the experiments of Bailey in which he was unable to produce excessive cholesterol feeding the characteristic cholesterol lesions of the kidney in guinea pigs that were easily produced in rabbits.

In diabetes mellitus the accumulation of cholesterol in the blood stream following upon the deficiency of burning carbohydrates in the tissues would seem to indicate that cholesterol must play some important part in the intermediate steps of the transformation between carbohydrate fat and protein, and vice versa, which is believed to take place within the cell. From the fact that the use of insulin reduces this hypercholesterolemia it seems doubtful that the specific cholesterol regulatory mechanism is at all disturbed. The leukocytes of the blood stream are probably the most highly organized of the cells of the body and the last to give up their capacity for individual function. We have previously reported the observation of two different cases of diabetes complicated by a pyelitis in which the pus cells were markedly anisotropic, indicating the presence within their protoplasm of abnormal quantities of lipoidal substances. We have also observed one specimen from a very severe case of diabetes which was loaded with sugar and acetone, and gave a strongly positive Boltz reaction indicating the presence of tryptophane in excessive amount, in which there was a very heavy sediment of granules, taken at first to be amorphous urates, but not dissolving on boiling and under the high power of the microscope showing the characteristic polarizing cross figure of the typical lipid granule. We have interpreted our observation of this specimen to indicate a supreme effort on the part of the kidney to eliminate the excess of cholesterol in the blood.

In considering the phenomenon of the low level of blood cholesterol in pernicious anemia it seems to us probable that the question of the transfer of this substance between the elements of the blood is involved. We now know with a comparative degree of certainty that the disease is due to a certain gastric deficiency, and while it may be that this

deficiency results in a lowered synthesis of cholesterol so that its total quantity in the body is definitely diminished, it seems probable that the decrease in the transportation capacity of the blood resulting from the decrease in number of red corpuscles is more directly at fault. In the transportation of food substances such as, for example, glucose, we know that the red corpuscles first take it up from the alimentary tract, at which stage their content is higher than that of the serum. Subsequently it is diffused from the corpuscles to the serum which then becomes higher in content and from which it is taken up by the tissues. Preliminary experiments (17) which we have not yet brought to a conclusion indicate to us that the red corpuscles may function in a similar manner in the processes of elimination of waste products such as urea. While we have found no studies on the comparative cholesterol of the corpuscles and serum available at the present time it seems quite likely that a parallel *modus operandi* for cholesterol exists, and that the lowered whole blood cholesterol of pernicious anemia is a result of the lack of sufficient red corpuscles in the blood stream to take up this substance from the alimentary tract.

In the surgical conditions in which the elimination of cholesterol in the urine has been observed and reported by us we feel sure that some hormonal mechanism must be involved. We have found a high elimination of lipoids by the urine in cases of injury to or disease of the gall bladder of whatever nature, both previous to and after operation, where no apparent injury to the kidney of any consequence existed. This evidence is not of itself conclusive as such specimens quite frequently contain bile from which the cholesterol may have been derived, though we have observed the lipoids in many such specimens bile negative by the usual test. The evidence in cases of hernia and other surgery involving the intestine would seem to be much more convincing. Apparently the inflammation and trauma of the intestine results in the absorption of cholesterol into the blood stream in a form or environment of other substances in which it cannot be utilized by the tissue cells and in which it is eliminated from the kidney in the urine. The operation

of a H(a) hormone is disturbed and a H(k) secretion called into play to eliminate the unused substance. We are able to give but very little information as to the quantities of cholesterol which may be eliminated in this way. Four or five of the typical lipid granules in a drop of the 30 times concentrated sediment of 15 cc. of urine is a strongly positive finding.

The work of Gardner and Gainsborough, to which we have previously referred, offers to our mind most convincing evidence in support of an hormonal hypothesis in normal cholesterol metabolism. By a series of experiments extending over several years these authorities have shown that distinct changes of level of blood cholesterol, as well as changes of its proportional distribution between the free and the combined forms, which may be either up or down, do occur during digestion and are demonstrable within three or four hours after the ingestion of meals of varying composition. No rational basis determining the direction of these changes has been established. Rather does the work of these experimenters leave us with the very clear impression that the direction of change of level of blood cholesterol occurring during digestion must depend primarily on the state of the organism with respect to cholesterol equilibrium at the time of ingestion of the meal and the composition or nature of the meal ingested.

The hypothesis that the normal kidneys do not eliminate cholesterol seems to be based primarily on histologic examinations. Miloslavich's micropolariscopic examination of 380 specimens of normal urine seems to be the only study of urinary elimination of which we can find a record in the literature. His specimens were apparently taken at random and the study not controlled either as to diet or as to time in the alimentary cycle of taking the specimen. While our examinations of pathologic material do not prove that cholesterol may be eliminated by the kidneys in health, they at least suggest such a possibility, and do show quite conclusively that cholesterol may be eliminated by the kidneys through the urine in conditions in which the kidneys are in no way directly involved. While it is our belief that such a function of

the kidney exists, it is difficult to attempt to deduce its mechanism from the findings of the micropolariscope alone, as certain inadequacies of this technic clearly are present. We have previously pointed out that about 95% of our positive findings have been in acid specimens. Lipoidal urinary elements have been occasionally observed in alkaline specimens, but it is our belief that when the condition in the kidney itself is clearly alkaline they will not be found. The micropolariscope is also inadequate to detect cholesterol in solution. Dr. Wm. G. Exton has made this point quite clear by his report that in a number of instances he had been able to detect lipoids by alcohol-ether extraction in specimens that were micropolariscopically negative.

All that our micropolariscopic examinations show us, therefore, is only a rough picture of what may be taking place. When lipid bearing epithelium is found it would seem to indicate that an accumulation of cholesterol is, or has been, present somewhere in the genito-urinary tract. Such an accumulation cannot be localized in the kidneys unless it is possible to demonstrate that the epithelium is derived from that source. The lipid cell is most generally a squamous cell and it, therefore, seems doubtful that such accumulations as are evidenced by its appearance in the urine extend beneath the superficial layers of the mucous membrane. The finding of a lipid cast signifies that an accumulation of cholesterol in the kidney exists and is accompanied by a definite insufficiency of or injury to that organ. It is not clear at the present time whether the large, foamy, cellular, blastomatous, lipid bearing elements detectable by the micropolariscope which we have designated as lipid crystals are the expression of a functional ability of the kidneys to eliminate lipoids, or simply the result of a catabolic process involving the cells. Their original morphology is most usually altered by maceration of physical and other forces before they come to our observation. They are frequently found in specimens containing abundant epithelium which is lipid negative and we, therefore, incline to the belief that they may represent a direct effort on the part

of the kidney to eliminate an excess of cholesterol from the blood.

The finding of the lipid granule in its typical characteristic form must represent a direct elimination by the kidneys or other portion of the genito-urinary tract of cholesterol. Whether the cholesterol is directly eliminated from the organ into the urine as a formed granule, or whether concretion takes place in the urine after elimination of the cholesterol or its constituent elements in solution is not of interest to us except insofar as the applicability of the micropolariscopic technic for its detection is concerned. These granules could be derived from no other elements of the urine, morphological or chemical, with which we are familiar, and therefore must represent an elimination by the organism of the substance or substances of which they are composed.

The early studies on cholesterol synthesis in chickens, and the findings of Munk and Miloslavich, that in man lipoiduria in chronic and subacute glomerulonephritis does not result until approximately eight weeks after the acute onset of the disease, leave the impression that metabolic processes involving cholesterol are probably quite difficult and time consuming. The finding of Gardner and Gainsborough that active changes occur during the digestive cycle is distinctly in opposition to this view. A closer study of the time factors involved in cholesterol synthesis and metabolism would, therefore, seem to be well worth the effort necessary.

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YORK COUNTY MEDICAL SOCIETY

IN MEMORIAM

Dr. I. J. Campbell, of Clover, S. C., was born in Bethel community on February 21, 1881.

His Medical education was obtained at Louisville, Kentucky, graduating in 1905. His Medical life was rather brief but crowded to the limit.

On May 16, 1907, he was married to Miss Lily Irene Brison of Clover, S. C. He leaves behind to mourn his departure a wife, two daughters and a son; a mother and two brothers.

His entire medical life until his inability to work came, was filled with patients of every description. He did not turn aside any patient because he or she was too poor to pay. Every sick patient who desired his help received it.

He not only answered to the call of the sick and afflicted but answered as well to the call of his country in her need. During the late World War he was station-

ed at Chicamauga Park. After his discharge from the army he left mortally sick; although he tried to practice medicine until a few years ago.

Again he answered the call to duty and became a very popular member of his state legislature as a representative where he faithfully served for two terms. At our last election he went to the Senate where he was serving so well until he was stricken with Angina Pectoris that ended his life February 7 1931.

"Know ye not that there is a Prince and a great man fallen this day in Israel."

"He who stills the ravens clam'rous nest and decks the lily fair with flow'ry pride" will not be forgotten by those left behind.

Committee Necrology York County Medical Society

E. W. Pressly

J. R. Miller

W. C. Whitesides

WOMAN'S AUXILIARY

South Carolina Medical Association

OFFICERS

Acting President, Mrs. L. O. Mauldin	Greenville
Vice President, Mrs. Carl B. Epps	Sumter
Recording Secretary, Mrs. C. W. Evatt	Greenville
Corresponding Secretary, Mrs. L. H. McCalla	Greenville
Treasurer, Mrs. J. W. Bell	Walhalla

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Publicity, Mrs. W. C. Abel	Columbia
Extension, Mrs. William Boyd	Columbia
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Hygeia, Mrs. J. R. Miller	Rock Hill
Legislative, Mrs. M. L. Parler	Wedgfield

COUNSELLORS

District 1, Mrs. W. W. Wild	North Charleston
District 2, Mrs. Ernest Cooper	State Park, Columbia
District 3	
District 4, Mrs. F. G. James	Geer
District 5, Mrs. A. W. Humphries	Camden
District 6	
District 7, Mrs. D. O. Winter	Sumter
District 8	

ACTIVITIES OF THE AUXILIARY TO THE GREENVILLE COUNTY MEDICAL SOCIETY FOR THE YEAR 1930

The Auxiliary to the Greenville County Medical Society was organized January 10, 1927, with twenty-five (25) charter members. Since then we have grown considerably in numbers. Our purpose is three fold—Social, Educational and Philanthropic.

In reviewing the work of the past year, we feel that there has been real accomplishment under the efficient leadership of our President, Mrs. L. O. Mauldin, who was assisted by Mrs. J. G. Murray, Vice-President, Mrs. L. H. McCalla, Recording Secretary, Mrs. B. C. Bishop, Corresponding Secretary and Mrs. Clay Evatt, Treasurer. We have cooperated with the Auxiliary to the South Carolina Medical Association in every way possible; also with the State Federation of Woman's Clubs and Womans Bureau City Federation of Chamber of Commerce.

The work of the Auxiliary was demonstrated through posters at the Annual Juvenile Exposition held in February at the Textile Hall. This received very favorable comment.

During the past year we have donated \$9.00 each month for the care of two children through our Milk Fund Chairman.

We cooperated with the Woman's Bureau in furnishing hostesses for Model Homes during Better Homes Week, and observing Child Health Day by placing tags, with health rules, for children on all milk bottles delivered on first of May. We also assisted with Red Cross Roll Call in November.

In addition to the four regular meetings two special meetings were held during the year. A Dutch Luncheon in March, at the Poinsett Hotel, which assembled not only the members of the organization but the State President, Mrs. W. H. Nardin, of Anderson, and a

number of invited guests. This was one of the most delightful social occasions of the year. A charming program, consisting of a series of short addresses, musical numbers, and readings was beautifully rendered. In November the Auxiliary held its first reciprocity meeting, at the home of Mrs. Curran Earle, with about 100 present. Invitations were issued to the President and one representative from each federated club in the city as well as all doctors' wives and daughters in the County. An address by Dr. Frank Howard Richardson of Black Mountain was the outstanding feature of the program. His subject was, "The Unusual Child." This he developed in a most interesting way. Following the address an informal discussion and social hour were enjoyed. This occasion proved so successful that the organization voted to have a "Reciprocity Day" each year.

Officers elected in January to have charge of the work for 1931 are as follows:

Mrs. J. G. Murray—President.
Mrs. W. H. Powe—Vice-President.
Mrs. I. H. Barksdale—Recording Secretary.
Mrs. J. M. Fewell—Corresponding Secretary.
Mrs. M. T. Moore—Treasurer.
(Mrs. L. H.) Mildred C. McCalla Recording Secretary, 1930.

The Committee in Charge of Arrangement of Activities and Entertainment for State Meeting to be Held in Greenville, May 5, 6, and 7.

Mrs. J. W. White—General Chairman with the following sub-chairmen and their committees.
Mrs. J. G. Murray—Publicity.
Mrs. W. H. Powe—Information.
Mrs. Clay Evatt—Finance.
Mrs. Will Fewell—Music.
Mrs. C. B. Earle—Decorations.
Mrs. J. L. Sanders—Transportation.
Mrs. I. H. Grimbail—Ball and Tea.
Mrs. B. C. Bishop—State Credentials Chairman.
Mrs. C. P. Corn—In Charge of Pages.
Mrs. L. H. McCalla—Luncheon.

Mrs. J. W. White, Chairman, wishes to announce that there will be golf for all who are interested so bring your golf outfit. In addition, a tea will be given the visiting ladies, a luncheon and the President's Ball, wives, mothers, sisters and daughters of all physicians attending the meeting are urged to be present. The members of the Auxiliary to the Greenville County Medical Society will serve as hostess. They will be in the lobbies of the principal hotels and give any desired information and render any service possible to visiting ladies.

To All Doctors' Wives of South Carolina Medical Association

It is my great pleasure to extend to all Auxiliary members and wives of physicians throughout the State, a most cordial invitation from the Greenville Auxiliary to come and be our guests at the State Medical meeting to be held here in Greenville, May 5, 6, and 7.

Many interesting and delightful plans are being made for your pleasure and entertainment by our General Chairman, Mrs. Warren White and her committees.

Greenville is the home of our Acting State President Mrs. L. O. Mauldin, so let all come and show her our appreciation of the fine work she is doing in our State Auxiliary.

Expecting you!

I am Sincerely,
Mrs. J. G. Murray,
Pres. Auxiliary Greenville
County Medical Society.

In accordance with a request sent to Dr. Kenneth M. Lynch, President S. C. Medical Association, the following committee has been appointed to serve as an Advisory Committee to the Auxiliary, Dr. Frank Lander, Williamston, S. C.; Dr. P. V. Mikell, Columbia, S. C.; and Dr. E. A. Hines, Seneca, S. C. We shall be very glad to cooperate with this committee at all times.

We are expecting great things from our Organization Chairman, Mrs. W. A. Boyd, of Columbia, S. C. She is very busy and we are looking forward to having some new Auxiliaries. Please send all notices, etc. for the Journal to our Publicity Chairman, Mrs. Wm. C. Abel, 1020 Pickens Street, Columbia, S. C. She will welcome all news from your Auxiliaries.

South Carolina has 170 members and 10 active Auxiliaries according to the last report—let's do better than this.

Mrs. J. W. Bell of Walhalla, S. C., State Treasurer, will be glad to hear from you before April 15—Remember this.

Don't forget your Historian, Mrs. H. M. Stuckey, Sumter, S. C. She is expecting you to send in your records from your County concerning your doctors who have practiced and given service in this state as far back as information is available. Also any account of the earliest forms of medical practice in each county.

Mrs. L. O. Mauldin,
Acting President.

PANORAMIC VIEW OF THE WOMAN'S AUXILIARY TO THE A. M. A., IN FOUR ARTICLES

3. Southern District

Mrs. C. W. Garrison

The third or Southern District of the Woman's Auxiliary to the A. M. A. may not have moved so rapidly as regards the number of Auxiliaries organized as the other sections but the quality of those existing

have proven them to be of the greatest value in promoting the aims of the national body.

Alabama reported three counties organized last year, and is particularly interested in a health program giving especial attention to children with a tuberculous condition. The group visited in Birmingham were alive and interested, and had the cooperation of their Medical Society.

Arkansas reported thirteen counties organized, all giving attention to a health program and trying to raise an adequate loan fund for medical students only. Some of the counties contributed obstetrical kits for use in the rural districts. Many of the Auxiliary members in Arkansas are devoting much time and energy to the Parent-Teacher work and are aiding in the various civic and welfare organizations. All will be gratified when this State is organized 100%.

Florida, large areas of which are sparsely settled, has ten auxiliaries. Some of these are composed of a combination of two or more counties. Proof of the quality of these groups was seen when a large medical organization and its Auxiliaries were entertained in Miami in 1929. Mrs. J. Ralston Wells, the little woman who now heads the State Auxiliary furnishes further proof of their aliveness and interest. Florida with her marvelous fruits, flowers, vegetables and her wonderful sunshine has just as wonderful and marvelous women in her Medical Auxiliary.

Georgia, which has given to A. M. A. Auxiliary one of its most efficient presidents, Mrs. Allen H. Bunce, has more counties than any other state of its size and has twenty-one of these organized for Auxiliary. They have the full approval and cooperation of the State Medical Association, and having attended their State convention in 1929, the writer will vouch for the fact that no national meeting is more replete with interest and enthusiasm than were found in Georgia, nor have we found anywhere a greater desire to foster the aims and purposes of the national body. No group of women can possibly have greater courtesy, interest and encouragement shown them and their work than is given to the Georgia Auxiliary by the medical men. Mrs. Harrold will bring from her state a goodly report.

Louisiana reports only two parishes organized. Taking into consideration the fact that one of these two Auxiliaries has a greater enrollment than have some whole states makes us feel that Louisiana will not be far behind in the number of parishes when her final report of accounting comes in. She is not lacking in interest in any direction because the president of the State Auxiliary, Mrs. Harrold, is of the type who says, "We will."

Mississippi reported four auxiliaries last year, and again we are able to speak with assurance of our expectations from this state. The president of the State Auxiliary attended the meeting in Detroit and returned to her state carrying with her additional enthusiasm and determination to gather into the fold more county organizations. This dream will come true. Mrs. Polk was the first to respond to our first circular

(Continued on page 120)

EYE, EAR, NOSE AND THROAT

J. F. TOWNSEND, M. D., F. A. C. S., CHARLESTON, S. C.

THE RELATION OF SINUSITIS TO NEPHROSIS IN CHILDREN

*Dr. S. D. Wimmer, Archives of Otolaryngology,
Feb. 1931. page 159.*

Clinically, nephrosis is characterized by edema, low urinary output, albuminuria, hyaline and granular casts in the urine, non-retention of nonprotein nitrogen, normal blood pressure and normal phthalein output. There are few, if any, red blood cells or pus cells in the urine.

Mariott stated that one of the most important and clearcut manifestations of infection in the nose and throat of children is tubular and glomerular nephritis. He also stated that nephritis is invariably associated with infection, and most frequently with infection of the nose and throat. In practically all cases of nephrosis in children under his observations, he found infection of the nasal sinuses, particularly the antrums. Others confirm this observation. Clausen says the nephrosis leads to increased susceptibility to infection. *Staphylococcus hemolyticus* was found to be the most common infecting organism.

Since drainage of the infected locality was followed by prompt cessation of the symptoms, Clausen concluded that toxic substances were absorbed from the focus.

The diagnosis of sinusitis in children in some cases presents some difficulty. A careful study, history and observation are necessary before this diagnosis can be definitely affirmed or denied. As Mariott stated, pain, headache and purulent nasal discharge are not necessary for diagnosis, nor can roentgenograms be fully relied on, especially in infants. Mariott described the young patient, suffering from sinusitis, as one frequently pictured in tuberculosis—pale and languid, with slight afternoon temperature and a chronic cough. Roentgenograms of the chest often show an enlarged hilus shadow and peribronchial thickening. Chronic bron-

chitis is often a part of the picture. Often, attacks of vomiting, occurring periodically and diagnosed as cyclic vomiting, are present. Heart murmurs and cardiac dilatation have been observed to clear up after treatment of the sinus disease. One fairly constant physical sign according to Mariott, is enlargement of the posterior cervical group of glands, these glands only enlarging from sinus disease, ear infections and scalp infections, the last two conditions being readily eliminated. Finally, the irrigation of the antrums and the cytologic examination as well as the culturing of the irrigating fluid, offer conclusive evidence of sinus disease.

The treatment of the diseased sinus may be either conservative or radical. In all cases, diseased tonsils and adenoids, if present, must be removed. Eighty per cent have been cured by this means alone. Autogenous vaccines have been of benefit in some cases; nasal shrinkage and irrigations, irrigations of the sinus, and in more resistant cases, window operation beneath the inferior turbinate, introducing a rubber catheter. Ten per cent solution of mild silver protein was introduced three times a day for five days. If the discharge was profuse, suction was applied. The tube was removed on the fifth day and subsequent irrigations were made with a straight needle or curved trocar. The irrigations are continued until the discharge is stopped. With a return of symptoms, irrigations are commenced again.

We have obtained good results with a Lichwitz needle or a Yankauer trocar, first applying a little of 10 per cent solution of cocaine, preceded by epinephrine, beneath the inferior turbinate or in the middle meatus, as the case may be. No untoward accidents have occurred from the use of cocaine; the small patients submit readily after their confidence is gained and prefer it to gas anesthesia. With a sterile needle, rubber connection, 10 cc. Luer syringes, fluid may be withdrawn for culture.

OBSTETRICS AND GYNECOLOGY

R. E. SEIBELS, M. D., COLUMBIA, S. C.

TRICHOMONAS VAGINALIS VAGINITIS IN PREGNANCY

*By Robert E. Seibels, M. D., F. A. C. S.,
Columbia, S. C.*

Leucorrhœa in some degree is an almost constant accompaniment of pregnancy. During the earlier months and especially when the patient suffers with vomiting of a large amount of thick mucous, a profuse mucoid discharge from the vagina is usually associated. Again after the eighth lunar month, a free vaginal discharge is one of the many complaints. As a general rule, this discharge is not irritating and relief is readily obtained by external bathing with castile soap and the use of a mild drying powder. Compound stearate of zinc powder may be used with great comfort provided the patient is warned as to its irritating qualities to the nose and throat if it is accidentally inhaled.

A more profuse and irritating discharge is apt to be regarded with grave suspicion of its specific origin by the average physician but a non-venereal vulvovaginitis does occur which is distinguishable from one of gonococcal origin only by careful examination with a microscope. This discharge is caused by the presence of *Trichomonas Vaginalis* in large numbers in the vaginal secretion. The technique of the examination is very simple. The vaginal speculum is inserted without the use of a lubricant and a portion of the secretion is scooped up by means of the posterior blade. A hanging drop study is then made. In addition to large numbers of epithelial cells and leucocytes, a freely motile organism about the size of a lymphocyte is found moving rapidly across the microscopic field. This organism is readily visible under the low power and may be easily identified under the higher magnification. There is some disagreement among authorities as to its pathogenicity, but the majority of observers have found considerable irritation when it is present and the amelioration of symptoms when it disappears. In a study of this type of

vaginitis in pregnancy by Bland and his associates, only thirteen per cent of the patients in whom positive smears were found complained of local symptoms. In our experience of a small group of cases, those complaining of a profuse discharge with aggravated itching in which the gonococcus was not found showed large quantities of the *Trichomonas*. Aside from the giving of relief to the patient, it is important to recognize the nature of the infection in order to prevent social and legal complications by falsely attributing a discharge to venereal origin and, secondly, because the puerperal morbidity rate is definitely higher in those who exhibit this infection.

Treatment of this condition is rather unsatisfactory as relief is usually prompt and so complete that the patient does not continue the remedies and recurrence is the rule rather than the exception. The basis of the treatment is cleansing and drying. This is readily accomplished by the free use of tincture of green soap and running water externally and internally. Following this, with the patient in the knee-chest posture, the vulva and vault of the vagina are carefully dried and a tampon saturated with boro-glyceride solution is inserted. This treatment continued daily for two weeks usually is followed by relief of symptoms and cure in the majority of patients. More recently, we have found that a more efficacious method than the use of boroglyceride is, after drying the vagina thoroughly, coating the vagina and vulva with a thin layer of powdered kaolin by means of a powder blower.

As the *Trichomonas* has been reported frequently in the male, examination of the husband for this infection should be a routine procedure to prevent reinfection of the wife.

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- (2) *Lynch, K. M.*: J. A. M. A., 79: 1150, 1922.

NERVOUS AND MENTAL DISEASES

E. L. Horger, M.D., State Hospital, Columbia, S. C.

DOES RELIGION CAUSE INSANITY?

In remote ages when an individual became insane it was commonly thought that he was possessed of the deity or a demon or that he was played upon from without by the one or the other. During the time of John Wesley, he was not allowed to preach in English prisons "lest the prisoners should be taken with enthusiasm and then fall into actual insanity." Even in present times religion is thought by many to be a cause of insanity. A physician of today who cares for the mentally sick frequently meets statements by family or friends of a prospective patient such as, "Religion caused him to go crazy," "My daughter got too much religion," "My wife lost her mind attending those meetings," etc.

There are, it is true, insane persons who, because of their actions and speech lead one to think that religion is the cause of their insanity. It may be possible that religion acts as an exciting factor in producing mental disorders in individuals of a certain mental make up. It might be stated further that with any person having an unstable mind religion may act as a precipitating factor in causing insanity, when such a person is worked upon by too earnest proselyting.

The question can best be answered by studying the causes of mental disease as listed in annual reports of hospitals caring for the mentally sick, and also by considering the opinions of authorities who make a study of mental diseases.

H. I. Schou in his "Religion and Morbid Mental States" cites from the "Reports From the State Mental Asylums and St. Hans Hospital, Denmark." In the former, which includes six hospitals, religious

influence was given as the cause of insanity in one half per cent of the cases; while at St. Hans, mental disease due to religion is not mentioned at all.

Professor Oppenheim says, "From my experience as a medical man, I reckon lack of faith as one of the most regrettable qualities. It seems to me that religion offers a strong, albeit by no means certain, support in the struggle against those powers which attack the nervous system. A strong and firm faith is a safe guard against most of the emotions which the vicissitudes of life call forth in those lacking this support."

Dr. Krafft-Ebing writes, "Altogether, we may assume that true religion, true ethical sense ennobles the human spirit and directs it toward something higher, affords comfort in adversity and will reduce the danger of insanity."

Dr. Hyslop, principal medical officer at Bethlem Mental Asylum, London, considers that "Constant simple prayer must be granted the foremost place among the hygienic precautions which can counteract mental disturbance, depressed state of mind and all the consequences of mental distress."

Dr. P. D. Koch: "I can not, from my own experience quote a single case where religious influence or emotion has given rise to insanity."

Professor Schou states further that the great psychiatric text books—Kraepelin, Bleuler, Binswanger and Siemerling—make no mention at all of religious experiences among the etiological factors in the psychoses. Therefore it can be stated that religion is rarely, if ever, a cause of insanity. It only acts as an exciting factor in the mentally unstable. It is not the seat of the trouble, but is only the channel thru which the mental disorder manifests itself.

PEDIATRICS

R. M. POLLITZER, M. D., GREENVILLE, S. C.

Over ten years have now passed since toxin-anti-toxin has been in general use in this country, and it is quite evident that there has been a marked decrease in the incidence and mortality from diphtheria, in those communities that have intensively availed themselves of its protection. However, during that time, diphtheria itself has apparently become more severe, and further the procedure of active immunization has not been employed by most men at a sufficiently early age, to be of the greatest service.

But even so, it is possible to rather accurately weigh the advantages and disadvantages of toxin-antitoxin, and to compare its efficacy and its untoward effects with other methods. The writer in 1927 (April 21), in a paper read before the South Carolina Medical Association stated that for prophylaxis toxin-antitoxin, made with goat serum rather than horse serum should be used, and made mention of the newer preparation called anatoxin or toxoid. Since then much has appeared in the literature, with facts and figures as to the percentage of individuals made immune; in regard to the time required for the body cells to respond, and the frequency and extent of by-reactions. In the *Journal of the American Medical Association* (January 1928), Paul S. Rhoads reviewed the work of immunization among the nurses of the Cook County Hospital, (January 1926—July 1927) and found that notwithstanding the administration of 3 doses of toxin-antitoxin, many developed diphtheria. It was subsequently found that much antitoxin-toxin on the market was not potent. In general however there is today no longer any question but that the extent of protection is not as great as we previously thought. Further there have appeared very many reports of cases, which upon the later use of horse serum developed severe and even alarming reactions.

In the *American Journal Diseases of Child* (March 1930), Schwartz and Janney, give an account of their careful comparative tests of toxoid and other immunizing agents in the pre-school child. They state that the t-a mixture fails in 25% of people. During a five year period, of 361 children, in only 78% could immunity be demonstrated.

In their hands t-a mixtures employing sheep serum as a carrier failed in 30% of cases. 104 children were employed for this series.

Of 10 children given Larson's ricinoleated toxin there was failure in 40%.

Not only have Ramon in France, and Glenn in England done much pioneer work with toxoid, but on this continent, Park of New York, and Fitzgerald and Moloney of Toronto have markedly advanced our knowledge. The latter gave three doses of toxoid to 93 children, of whom nearly all were under 2 years. They succeeded in 92 cases or 98%. Of 128 children who received toxoid, there was but one reaction, and

that was local. The writers are convinced that toxoid in the pre-school child has marked superiority over other methods.

G. F. Weinfeld and M. Cooperstock in an article in the *American Journal Diseases of Children* (July 1929), fully discuss the comparative effects of diphtheria toxoid and toxin-antitoxin. They employed for their work, 104 adults, all of whom were Schick positive. Following the injection of two doses of toxoid, 1 c.c. each, three weeks apart, 92% were rendered Schick negative. That is they were immunized. They note that while local and general reactions did occur, they were extremely rare in children, and that not a single child under 7 years reacted adversely. Not only from a-priori reasoning and the literature, but from their experiment, they came to the conclusion that the use of toxoid obviates the real danger of serum sensitization. Further that it is a superior immunizing agent. Then too toxoid is decidedly more stable, and fewer doses are required.

In another article (*Rapidity of Immunization with Diphtheria Toxoid*, *American Journal Diseases of Children*, Nov. 1930) the same authors give a report on their work with three groups of adults, who were made immune by the use of toxoid. They found that in one group consisting of 65 persons, on retesting with the Schick, at the end of from 16 to 22 weeks that 60 or 92% had become immune. They are convinced from their investigation that only two doses of toxoid are necessary, and that the full c.c. dose should be given each time. Further they are of the opinion, along with others that unless three weeks intervenes between the first and second injection the value of the procedure is impaired.

Of course many individuals become immune even more rapidly than four months; for in 29 out of 50 subjects to whom toxoid was administered subcutaneously, a negative Schick reaction developed as early as the end of the third week. That is in the majority of people (58%) after having had toxoid become immune within three weeks. This is far better than the figures for toxin-anti-toxin.

So in general one can conclude that toxoid unquestionably does induce immunity; that it does so in a high percentage of recipients; that the immunity is rapidly induced; and that no serious reaction is brought about.

The next question of importance is how permanent is this immunity. While it is rather soon to be definite or certain, yet from the reports in the literature, one can conclude that the immunity lasts a long time, perhaps life. Rubinowitch and others (*American Journal Diseases of Children*, July 1929, p. 39) by testing found it to persist for 4 years. Defries (idem) thinks inferentially that toxoid produces exactly the same degree of immunity as the disease itself, and

therefore that in most instances it is lifelong.

About two years ago the writer discontinued using goat t-a, substituting toxoid. So far but one very mild local reaction has been noted.

The usual procedure is to give 2 doses, each 1 c.c., three weeks apart. All mothers who bring infants to the office for any reason, are on their first visit, advised to have the baby immunized preferably between the sixth month and the first year, or if they prefer soon after the ninth month. That is of course providing there is no contra-indication. During the first year of life there is no reaction, and the infant is not afraid. Under six months there is in most a natural immunity, but between six months and two years the susceptibility amounts to 60 or 70%. (W. P. Lucas) Even though our knowledge is almost complete, yet in the U. S. there is still today a mortality of about 10%. In some countries, within the past few years it has in-

creased. In Vienna during the early part of 1926 the mortality reached 18%, in spite of the best possible treatment; and in Berlin more recently it rose to 25%. (K. Kundratitz. Wien, Klin. Wchnschr. July 21, 1927. in Practical Medicine Series, Pediatrics, 1928).

So that it would seem that inasmuch as death from diphtheria still occurs and at times the epidemics assume serious proportions; we ought to try to eradicate the disease. While in many communities the school child is being given the prophylactic treatment, that is not the best procedure. The pre-school child, and best of all the infant, is the one who should be rendered immune; not only for his sake, but for the common weal.

The practicing physician rather than the public health official is the proper party to do this work. And lastly at the present moment toxoid from every angle appears to be the agent that should be employed.

PUBLIC HEALTH

By B. F. WYMAN, M. D., Director of County Health Work, Columbia, S. C.

One of the greatest services any health department can render is to continually call to the attention of the people the need of the family physician.

MONTHLY REPORT OCONEE COUNTY HEALTH DEPARTMENT FOR FEBRU- ARY, 1931

Submitted to Health Committee, County Medical Society.

School health work for the month of February:

Schools visited 20.

Pupils examined 786.

Pupils with physical defects 494.

Total number of defects 697.

Total number of defects corrected 114.

Follow up visits 27.

Small pox vaccinations 106.

Whooping cough serum doses 6.

Toxin-antitoxin doses 3.

Water analyses for the school house well or spring 16.

Two cases of hookworm treated.

Four applications for crippled children were made out and sent to the Shriners' Hospital, Greenville.

Six bags of Brewer's yeast sold during month.

Two pellagra patients were visited.

One patient admitted to State Park.

Two cases of tuberculosis were found.

Nine tubercular suspects were examined.

Two tubercular homes were visited.

Infant hygiene nursing visits 13.

Miscellaneous visits 76.

Office visits 61.

Homes visited during month 50.

Forty talks were made to school children.

Attendance 800.

Total number of nursing visits 148.

Health booklets distributed 947.

One specimen of feces sent to the State Laboratory for analysis.

Prenatal case visited and advised to place herself under the care of her physician.

A booklet on prenatal care was left with her.

Three case investigations were made for the National Red Cross concerning one ex-service man and two marine boys.

One afternoon was spent in Newry mill village and another in Lonsdale.

T. G. Hall, Director,
Oconee County Health Department.

S U R G E R Y

Wm. H. Prioleau, M.D., Charleston, S. C.

DETERRENTS AGAINST OPERATIVE TREATMENT OF HYPERTHYROIDISM

Wm. H. Prioleau, M. D.

In few diseases can we offer such assurances of relief as we can by operation in cases of hyperthyroidism. As regards satisfactory end results no other form of treatment can be compared with it. Yet in spite of this there is often great hesitancy both on the part of physicians and the laity in seeking this means of relief. To account for this there are a number of causes which it would be well to consider.

An important factor is the hope of obtaining relief by non-operative methods. To support this there is some basis. A small percentage of cases will recover spontaneously. A slightly greater percentage of cures will result from properly directed medical treatment which consists of rest, sedatives, and iodine. The addition of XRAY will generally effect some relief and a still greater percentage of cures, than medical treatment alone. The fact that the disease is cyclic and frequent remisissions are common often gives false impressions unless the case is observed for some length of time. The natural tendency of the disease is towards chronicity and the sum total of permanent cures from non-operative methods is very small.

Probably the greatest deterrent against operative treatment is the relative frequency of unsatisfactory results. A number of these are accounted for by faulty diagnosis. Vasomotor instability, nervousness of a functional nature, and the nervousness and cardiac

disturbances of cardio-renal disease are the conditions most often mistaken for hyperthyroidism. In such cases it is evident that the results of thyroidectomy would be disappointing.

Another factor is operative fatalities. Under proper conditions they should be below 1%—however only too often do they amount to 10-20%. True recurrences of the disease are of little significance as they seldom exceed 1%—However of great importance and generally confused with true recurrences is the **continuation** of the disease following incomplete operations. This last group would not exist if all thyroidectomies were properly performed; however it not infrequently amounts to 10-20%. For the sake of completeness we shall have to include vocal cord paralysis which also depends upon the operative technic, and astly the occasional case of hypothyroidism which condition can be effectively alleviated by thyroid medication.

In summary—thyroidectomy offers a very effectual and the only satisfactory way of obtaining permanent cures in cases of hyperthyroidism.

This form of treatment is often sought on account of the hope of cures by other methods, for which there is very little basis—and the quite large number of unsatisfactory results due to faulty diagnosis and improper operative technic. Hyperthyroidism should be considered a disease requiring very special attention both from a standpoint of diagnosis and treatment, otherwise the results from thyroidectomy will often be disappointing.

NEWS ITEMS

Drs. George R. Wilkinson and Hugh Smith of Greenville and Dr. Robert Wilson of Charleston attended the Congress of Internal Medicine and the College of Physicians in Baltimore recently.

Dr. J. S. Stribling of Seneca who recently suffered a severe automobile injury is well on the road to recovery. The doctor has been in active practice for about forty-three years and has been frequently a member of the House of Delegates of the South Carolina Medical Association.

The Abbeville County Memorial Hospital has just been destroyed by fire but indications are that the Hospital will be rebuilt at an early date. The building was insured for a sufficient amount to aid materially in constructing a new plant.

Dr. W. C. Marett of Seneca is a patient at the U. S. Veteran's Hospital, Lake City, Florida. Reports are to the effect that the doctor is improving rapidly.

The Woman's Auxiliary of the American Medical Association meets in Philadelphia, June 8-13, and the advance program indicates that there will

be an unusually large attendance.

Dr. J. L. Bolt of Easley has moved his family back to Easley from Six Mile where for some time he had been connected with the Six Mile Hospital. Dr. Bolt will continue his connection with the hospital however.

Dr. John A. Kolmer has been appointed Professor of Immunology and Chemotherapy at Temple University, Philadelphia. Dr. Kolmer will be one of the distinguished guests at the meeting of the South Carolina Medical Association, May 5, 6 and 7, Greenville, S. C.

Perhaps you want a certain kind of instrument which is not advertised in the Journal, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

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THE UROLOGICAL ASSOCIATION OF SOUTH CAROLINA

BACKACHE IN THE MALE

Hugh E. Wyman, M. D.

The Wyman Urological Clinic, Columbia, S. C.

The belief that backache is always the result of kidney disease seems to prevail in the minds of the average layman and because of this apparently well established belief a large number of patients present themselves to the urologist to be treated for "kidney trouble."

There are many causes for backache in the male, but I shall confine my remarks to the "backache in the lower back" particularly over the lumbo-sacral region.

We see many men complaining of a constant, steady aching pain in the lower lumbo-sacral region. This pain is usually in the center or it may be more to the right or left and sometimes will radiate down the thigh. Examination of urine voided in three glasses usually shows the first glass to contain pus shreds, the other two glasses clear. Chemical examination of the urine for albumen and sugar is negative. Microscopical examination shows an occasional pus cell, otherwise normal.

With the above complaint and urinary findings a diagnosis of infected prostate is almost always correct. However, in making such a diagnosis, one should exclude all other causes of backache, at times resorting to X-ray studies, and at the same time a very careful examination of the prostate gland should be made. The average type of infected prostate when felt by digital examination per rectum does not reveal any enlargement, the gland is usually soft and boggy and very tender to palpation and there may or may not be small areas present in one or both lobes, nodular in character, and firmer than the surrounding tissues. The expressed secretion after gentle massage should be examined under the microscope for the presence of pus. We have often noted that on first examination the expressed secretion may contain very little if any pus, but the patient will experience almost immediately marked relief from his backache. If the patient is instructed to return after a three to five day interval and prostatic massage is repeated examination of the secretion at this time will show a considerable number of pus cells. We believe that this is due to the fact that on the first examination we obtain only a superficial

secretion and not a well represented specimen from the entire gland. There is somewhat of an art in properly massaging a prostatic gland which comes only with experience in palpating a large number of glands. When the finger is introduced into the rectum the general contour, size, shape and consistency of the gland should be noted by gentle palpation and after this one should start at the highest point on either the right or left side massaging always towards the center until the entire surface of the gland has been massaged.

The prostate gland is one of the principal organs for foci of infections in the male, and on general examination should always be excluded. Gonorrheal urethritis is not responsible for all infected prostates. Any infection in the upper urinary tract will necessarily give rise to an infected prostate. Foci of infection in other parts of the body such as abscessed teeth, infected tonsils, or sinuses, are etiological factors. Chronic constipation is also an important causative factor, infection in this instance entering the prostate by continuity of tissue as well as through the blood stream.

Treatment: All foci of infection in the body should be sought out and if found removed or treated according to their nature. Prostatic massages should be instituted at about five day intervals and those cases with many shreds in the urine should be irrigated with a warm 1:5000 solution of potassium permanganate following the massage. The newer urinary antiseptics, "Serrenium," "Pyridium," and "Mallophone" are the only drugs we know definitely stain the prostatic secretion showing evidence of prostatic penetration. Whether or not they have any beneficial effect we have not yet been able to determine.

This massage period may take from a few weeks to several months and should be continued until the patient is symptomless and the prostatic secretion is clear. Following this the patient is given a rest period of one month to six weeks at which time he returns for another examination. Those suffering from infected prostates can be kept symptomless and the infection in the gland kept at a minimum, but it cannot be definitely and permanently cured.

In conclusion I wish to emphasize that prostatic infection is the most common cause of backache in the male. A very satisfactory positive proof that the prostate is infected is finding shreds in the voided urine.

INTERNAL MEDICINE

J. H. Cannon, M. D., F. A. C. P., Charleston, S. C.

THE THERAPEUTIC VALUE OF DIGITALIS IN PNEUMONIA

John Wycoff, M.D., Eugene F. DuBois, M.D., and I. Ogden Woodruff, M.D.

J. A. M. A., Volume 95, No. 17, Oct. 25, 1930.

Uncertainty has existed for a long time as to the therapeutic value of digitalis in pneumonia. However, when Cohn of the Rockefeller Institute in 1917 showed that digitalis had an effect on the heart in this disease it was naturally interpreted as a beneficial one, and following his suggestion it was widely used as a routine measure. Hope of securing more uniform and satisfactory circulatory support was further inspired at this time by the more generally available standardized digitalis preparations, and a more general knowledge of the modern conception of digitalis dosage. Notwithstanding its general use, a failure to produce an appreciable lowering of mortality as a whole and the difficulty in determining what benefit if any was derived in the individual case, or indeed if doubtful or actual harmful results might not be ascribed to it has stimulated thought among many, and efforts among those such as the above authors to attempt a study whereby controlled observations could be subjected to critical analysis.

Their study of two years was conducted so as to avoid the weak points of other investigations of a like nature, in that alternate cases were given the drug and the others were given the same care but without receiving digitalis. Moreover, a sufficient number of cases were studied under these circumstances to permit of reasonably justifiable conclusions.

Out of a total of 742 cases, 404 did not receive digitalis, 136 cases died, a mortality of 33.7 per cent; 338 cases received the drug and 140 died a mortality of 41.4—a difference of 7.7 higher mortality than those not getting digitalis. They point out that a difference of 7.7 in a mortality of 33.7 means an increase of mortality of more than one-fifth.

It has been felt by many that the older patient should be supported by digitalis. In this series, those over 40 showed a higher mortality by about 6 per cent if they received digitalis, and after 50 it was 7.8 higher than those not receiving the drug.

As regards the different types of pneumonia the results were consistent with the above findings in all but type II which showed 2.3 less mortality

in the digitalis treated than in those not so treated. They are unable to offer any explanation for this, especially if one contrasts this with type III which shows 15.9 per cent less mortality in the cases not receiving the drug.

Their results are very interesting in regard to auricular fibrillation and flutter in view of Cohn's and Jamison's statement that greatest benefits should be expected from digitalis under such circumstances. There were 33 cases of either fibrillation or flutter—16 cases received digitalis and 17 did not—of those who were not given the drug, 9 died, a mortality of 52.9; of the 16 who were given digitalis 14 died, a mortality of 87.5 per cent.

Those cases developing pneumococcal complications, such as empyema, endocarditis, pericarditis, arthritis, and meningitis, there were 27 cases receiving digitalis; 19 died, a mortality of 70.4 per cent; 24 such cases received no digitalis; 14 died, a mortality of 58.3 per cent. "A difference of 12.1 per cent in favor of those not receiving digitalis."

More cases showing positive blood cultures and receiving digitalis showed .4 per cent lower mortality than a like number of cases which did not get the drug. However, in the cases with negative cultures the mortality was 14.3 per cent lower in those cases not getting digitalis.

Further analysis of the cases indicate that the increased mortality occurred in those case receiving the greatest amount of digitalis irrespective of whether or not they showed toxic digitalis signs. They did not find any evidence showing that optimum digitalis dosage could reduce mortality. In pneumonia the effects of digitalis can be recognized only by electrocardiogram or by toxic effects. Moreover, serious damage by the drug was not preceded by evidence of mild toxic effects as in congestive failure in organic heart disease. In this series "there was a definite increase of mortality in those cases who received large doses of digitalis, but who had none of the clinical symptoms of either early or late digitalis toxæmia." They venture the suggestion that because of the effects of the pneumonia toxin digitalis may produce death not infrequently without any warning signs of the usual clinical manifestations of mild or profound digitalis toxicity, and conclude by saying that if this be true, extraordinary care should be used in the giving of digitalis in pneumonia, for the dose cannot be guided except by an arbitrary limitation of the dosage.

SOCIETY REPORTS

COLUMBIA MEDICAL SOCIETY

The first regular meeting of the Columbia Medical Society was called to order by the President, Dr. James S. Fouche at 8:30 P. M., March 9, 1931.

Minutes of last regular scientific meeting read and adopted.

Dr. Harmon reported a very interesting case diagnosed preoperatively as ruptured viscera. After some reaction by the patient the abdomen was opened finding a ruptured spleen which was sutured when the hemorrhage was under control the patient was given a glucose infusion. Six or eight hours later the patient received a blood transfusion. Patient went to recovery.

The floor was maintained by Dr. Harmon under personal privilege who answered the remarks of Drs. Floyd Rodgers and Richard Allison at the previous scientific meeting regarding treatment of skin cancer. Early blockage and then removal is treatment at hands of surgeons rather than depending solely on radium or X-Ray.

Dr. Davis reported a case in an elderly man who had an acute retention of urine—developed an epedeynitis, then a septicemia—colon B. Treatment indwelling catheter, mercurchrome intravenously and Dr. Davis believes that had a personal prostatotomy been done rather than a suprapubic the septicemia would not have developed.

Dr. O. B. Mayer made the following motion: That the president of the Columbia Medical Society appoint a committee with power to act to draft a suitable letter through the proper authorities setting forth the advantages of Columbia as a site for the Veteran's Hospital from a medical standpoint. Motion seconded and passed. The president appointed Dr. W. J. Bristow and Dr. J. H. Taylor.

The first paper of the evening was traumatic Pneumoccephalus by Dr. Robert S. Cathcart, Professor of Surgery of the Medical College of the State of South Carolina. Dr. Bristow opened the discussion and Dr. Bunch and Dr. Floyd Rodgers discussed this condition. After injury to the head one must be careful to prevent coughing and sneezing. Paper closed by Dr. Cathcart.

The second paper was Stressing some Everyday Procedures in Obstetrics by Dr. Robert L. McCrady, Assistant Professor of Obstetrics of the Medical College of the State of South Carolina. Dr. McCrady brought out some very practical points in handling obstetrical cases. Don't hurry labor, don't use morphine in labor, forceps are used too much, in breech presentation don't hurry up too much after umbilicus is reached—may take 15-30 minutes after this—use of mercurchrome pack to control post partum hemorrhage, etc.

Dr. Seibels opened the discussion and brought forth some interesting points. Paper discussed by Drs. Harmon and Bunch. Dr. McCrady closed the paper. Both papers emphasize importance of the X-Ray.

Thirty three members present and sixteen visitors. Among some who were introduced and gave brief talks were: Dr. Kenneth Lynch, President of the South Carolina Medical Association. Dr. Charles Mobley, President elect of the South Carolina Medical Association. Dr. Timmerman, of Batesburg, Dr. Hugh Smith, of Greenville, Dr. Frontis of Ridge Springs and Dr. Prioleau of Charleston.

Society adjourned at 10:35 P. M.

Respectfully submitted,

William Weston, Jr., Secretary

THE SUMTER COUNTY MEDICAL SOCIETY

The Sumter County Medical Society met in the Staff room of the Toumey Hospital on March 5, at 7:30 P. M., and was called to order by the president, Dr. C. J. Lemmon.

After roll call minutes of the last meeting were read and approved.

Members present: Drs. Brunson, Dunn, Epps, Littlejohn, Lemmon, Mood, H. A. Mills, J. H. Mills, W. E. Osteen, Parler, Parker, Wintery, Shaw. Visiting Doctor O. D. Baxter.

The first thing on the program was a moving picture exhibition "Traumatic Surgery of the Lower Extremity" by Dr. J. R. Dunn. The films were obtained from Davis and Geck, Brookland, N. Y. The pictures showed in minute detail the suturing of injured blood vessels and nerves. The care of cases of shock, and the various matters of interest which arise in all Traumatic Surgery of these parts. The picture was well worth while and instructive.

Under the head of general Business and invitation from Dr. James S. Fouche, President of the Columbia Medical Society, was extended us to visit them on March 9th, and be present at a special program which was to be put on by a few of the Charleston doctors.

Under this heading also an application for membership into this Society was received from Dr. R. W. Ball. The usual routine was dispensed with and he was unanimously elected, and the Secretary requested to notify him.

On motion it was unanimously decided that any and all members failing to pay their dues would be dropped from the roll of the Society.

The meeting then adjourned for supper at the Imperial Cafe.

H. L. Shaw, M. D.
Secretary.

Official Program Greenville Meeting May 5,6,7, 1931

Scientific Program

The Poinsett Hotel

Wednesday, May 6, 9 A. M.

Meeting called to order by the President.

Invocation, Dr. Geo. W. Quick, Pastor First Baptist Church, Greenville, S. C.

Address of Welcome by Dr. Irving S. Barksdale, President Greenville County Medical Society.

Response by Dr. Charles A. Mobley, President-Elect South Carolina Medical Association.

Announcements.

President's Address

By Dr. Kenneth M. Lynch, Charleston, S. C.

Papers

Reading time 15 minutes; discussion five minutes.

SYMPOSIUM ON PSYCHIATRY

Introspection as the Result of Medical Examination.

By Dr. C. F. Williams, Columbia, S. C.

The Mental Conditions which may Complicate Organic Disease.

By Dr. Olin B. Chamberlain, Charleston, S. C.

The Psychoneuroses.

By Dr. J. M. Beeler, Spartanburg, S. C.

Discussion Opened by Dr. W. P. Beckman, Columbia, S. C.

The Treatment of the Infected Cervix—With a Report of a Series of Cases.

By Dr. A. E. Baker, Jr., Charleston, S. C.

Discussion opened by Dr. Douglas Jennings, Bennettsville, S. C.

Præcox Pubertas in the Child associated with Malignant Ovarian Tumor—Report of a Case.

By Dr. H. S. Black, Spartanburg, S. C.

Discussion opened by Dr. Robt. E. Abell, Chester, S. C.

Asthma, Hay Fever and Other Allergic Conditions.

By Dr. F. M. Routh, Columbia, S. C.

Discussion opened by Dr. Joseph I. Waring, Jr., Charleston, S. C.

Clinical Appraisal of Spinal Anesthesia.

By Dr. J. R. Young, Anderson, S. C.

Discussion opened by Dr. C. B. Earle, Greenville, S. C.

Two Years Experience with Spinal Anesthesia in General Surgery.

By Dr. George H. Bunch, Columbia, S. C.

Discussion opened by Dr. A. F. Burnside, Columbia, S. C.

Hyperthyroidism following Thyroidectomy.

By Dr. William H. Prioleau, Charleston, S. C.

Discussion opened by Dr. O. B. Mayer, Columbia, S. C.

The White House Conference on Child Health and Protection.

By Dr. D. L. Smith, Spartanburg, S. C.

Discussion opened by Drs. Wm. Weston, Sr., Columbia, S. C., and C. W. Bailey, Spartanburg, S. C.

Neglected Determining Factors in Infant Feeding.

By Dr. William Weston, Columbia, S. C.

Discussion opened by Drs. Hugh Smith, Greenville, S. C. and Edgar A. Hines, Seneca, S. C.

Recess 1 to 3 p. m.

Wednesday Afternoon—3 P. M. to 6 P. M.

Piarcoid Associated With Tuberculosis of the Larynx. Case Report.

By Drs. J. R. Allison and P. V. Mikell, Columbia, S. C.

Discussion opened by Dr. F. D. Rogers, Columbia, S. C.

Medical Economics.

By Dr. B. A. Henry, Anderson, S. C.

Discussion opened by Dr. J. R. Young, Anderson, S. C.

Special Order, 4 P. M.

ADDRESS:

THE PRACTICAL APPLICATION OF VACCINE THERAPY IN THE PROPHYLAXIS TREATMENT OF DISEASE.

By Dr. John A. Kolmer, Professor of Pathology and Bacteriology, University of Pennsylvania, Philadelphia.

Discussion of Operations for Senile Cataract with Demonstrations by Moving Pictures.

By Dr. I. Jenkins Mikell, Columbia, S. C.

Discussion opened by Dr. P. G. Jenkins, Charleston, S. C.

The aid of X-Ray Films in Confirming the Diagnosis of Chest Conditions.

By Dr. W. G. Byerly, South Carolina Sanatorium, State Park, S. C.

Discussion opened by Drs. S. E. Lee, Greenville, S. C., and Thomas Pitts, Columbia, S. C.

THURSDAY, MAY 7, 8:30 A. M.

Clinico-Pathological Conference, conducted by Dr. Kenneth M. Lynch, Professor of Pathology, Medical College of the State of South Carolina.

PAPERS 9 A. M.

Symposium Presented by the Urological Society of South Carolina

Obstructive Uropathy

Stones.

By Dr. L. P. Thackston, Orangeburg, S. C.

Strictures and Kinks of the Ureters.

By Dr. W. R. Barron, Columbia, S. C.

Obstruction to Urethras.

By Dr. Milton Weinberg, Sumter, S. C.

Vesicle Neck Obstruction.

By Dr. J. J. Ravenel, Charleston, S. C.

Discussion opened by Dr. T. M. Davis, Greenville, S. C.

Special Order, 11 A. M.**ADDRESS:****SURGICAL LESIONS OF THE STOMACH AND TREATMENT**

By Dr. Dean Lewis, Surgeon in Chief, Johns Hopkins Hospital, Baltimore, Maryland.

Selective Sterilization.

By Dr. B. O. Whitten, South Carolina Training School, Clinton, S. C.

Discussion opened by Drs. F. M. Routh and C. F. Williams, Columbia, S. C.

The Importance of Eugenics in South Carolina.

By Dr. R. E. Sumner, Rock Hill, S. C.

Recess 1 to 2 p. m.

Clinics

A new feature will be introduced at the Greenville meeting in an effort to hold the attendance to the maximum on the second afternoon, Thursday, May 7, by special clinics at the various hospitals as follows:

Shriners Orthopedic Hospital—Clinic conducted by Dr. J. Warren White and Dr. Samuel Engle Lee.

Greenville City Hospital—Surgical Clinic conducted by Dr. G. T. Tyler, Jr.

Greenville City Hospital—Diabetes Clinic conducted by Dr. George R. Wilkinson.

There will be a clinic at Brockman's Clinic, Greer, S. C., 2:30 to 5 P. M.

PROGRAM

—of the—

Woman's Auxiliary S. C. M. A.

First Baptist Church Parlors, Greenville, S. C.

MAY 6, 1931, 10 A. M.**PRESIDING**

Mrs. L. O. Mauldin, Acting President, Greenville, S. C.

Mrs. Carl Epps, Vice-President, Sumter, S. C.

Song—America.

Scripture Reading and Prayer.

Creed—Leader, Mrs. J. S. Stribling, Seneca, S. C.

Words of Welcome—Mrs. J. W. White, Local Chairman.

Response—Mrs. H. M. Stuckey, Sumter, S. C.

Music—Mrs. William Fewell, Chairman, Greenville, S. C.

Message—Acting President.

Presentation of Officers.

Address—Mrs. James Newton Brawner, Past

President of the Auxiliary of the Southern Medical Association and the Woman's Auxiliary of the Georgia State Medical Association, Atlanta, Ga. Music.

Reports:

State Committee.

Auxiliary Reports

Report of Credential Committee, Mrs. B. C. Bishop Chairman.

Election of Officers.

2 P. M.—Luncheon, Mrs. L. H. McCalla, Chairman. Mrs. J. G. Murray, local President, presiding.

This luncheon is complimentary to the visiting ladies by the Greenville Auxiliary.

Pages:

Miss May Mauldin, Acting President's Page, Greenville, S. C.

Mrs. Jack Parker, Greenville, S. C.

Mrs. William Bell, Walhalla, S. C.

Mrs. J. H. Cutchins, Easley, S. C.

Mrs. R. A. Blakey, Greenville, S. C.

The Executive Board will meet at 9 a. m.

Registration will begin at 9 a. m.

PROGRAM**South Carolina Public Health Association Annual Meeting**

Poinsett Hotel, Greenville, S. C.

May 6, 1931**Morning Session, 10 A. M.**

Meeting Called to Order.

A. E. Legare, C. E., State Sanitary Engineer, Columbia, S. C., President of the Association.

Invocation.

Rev. Malcolm S. Taylor, Greenville, S. C.

Address of Welcome.

Honorable A. C. Mann, Mayor, Greenville, S. C.

Address of Welcome.

I. S. Barksdale, M. D., President Greenville County Medical Society, Greenville, S. C.

Response.

F. M. Routh, M.D., Member Executive Committee, State Board of Health, Columbia, S. C.

Exophthalmic Goitre.

Hugh Smith, M.D., Greenville, S. C.

Stream Pollution.

Speaker to be Announced.

How the Health Officer Can Obtain the Cooperation of the Medical Profession.

L. L. Lumsden, M.D., Medical Director, District No. 4, United States Public Health Service, New Orleans, La.

The Program for the Prevention of Pellagra in South Carolina.

C. V. Aiken, M.D., Surgeon United States Public Health Service, Columbia, S. C.

Infant and Maternal Mortality in South Carolina.

James A. Hayne, M.D., State Health Officer, Columbia, S. C.

The Child Health Education Program of the South Carolina Tuberculosis Association.

Miss Nell Whaley, Director, Child Health Education Service, South Carolina Tuberculosis Association, Columbia, S. C.

Afternoon Session 3 P. M.

Business Meeting.

Reading of Minutes of Last Meeting.

Treasurer's Report.

Committee Reports—Executive, Membership, Auditing.

Report on Essay Contest and Award of Prizes.

Miscellaneous Business—Old, New; Courtesy Resolutions.

Report of Nominating Committee.

Election of Officers.

Adjournment.

INFORMATION

The Council will meet at 3 p. m. Tuesday, May 5.

The House of Delegates will convene at 8 p. m., Tuesday, May 5, at the Poinsett Hotel.

Alumni Meeting of the Colleges

One of the most enjoyable luncheons held annually is that of the meeting together of the Alumni of all colleges. This will be held on Wednesday, May 6, at 1 p. m. It is expected that Dr. John A. Kolmer, one of our distinguished guests, will be present and deliver an address on this occasion. A short business session of the Alumni Association of the Medical College of the State of South Carolina will be held also. This annual luncheon now serves the purpose of bringing together the entire Association and focusing the attention of every member on the great cause of medical education. The meeting is always short, snappy and intensely interesting. Every doctor present at the State Medical Convention is expected to participate in this luncheon.

Election of Officers

In addition to the election of a President-Elect and Secretary-Treasurer the following Councilors will have completed their terms of office:

First District—Dr. J. H. Cannon, Charleston, S. C.

Third District—Dr. T. L. W. Bailey, Clinton, S. C.

Fifth District—Dr. J. R. Des Portes, Fort Mill, S. C.

Seventh District—Dr. T. R. Littlejohn, Sumter, S. C.

Board of Medical Examiners

The terms of office of the following members expire at this meeting:

Dr. Robt. E. Abell, Chester, S. C., 5th Congressional District.

Dr. N. B. Heyward, Columbia, S. C., 7th Congressional District.

Place of Meeting for next Year

It is urged that societies and cities contemplating inviting the Association for the 1932 meeting have their invitations in the hands of the Secretary as early as possible in order that the House of Delegates may give due consideration to this important matter. With the great increase in attendance in recent years it has become necessary that ample accommodations be available if the Association is to function without serious limitation of its varied activities.

Wednesday night the President's reception and dance will be given at the Poinsett Hotel. The entire evening will be devoted to this event. This occasion is always looked forward to by the members of the Association and their families as a delightful opportunity to meet the citizens of the city in a social way.

Golf Privileges.

The various Golf Clubs will extend every courtesy to the members while in the city. The Association, however, will not sponsor a tournament this year.

Exhibits

All of the exhibits, both scientific and commercial, will be conveniently located at the Poinsett Hotel.

Motion Pictures—With Sound

(By Courtesy of the Petrolagar Laboratories)

Wednesday May 6, 2:30-3:00 P. M.

At the Poinsett Hotel

These pictures will represent operative procedures of interest to the Association.

Chick Springs Hotel Sanatorium

This institution extends to the profession a cordial welcome to visit there during their stay in Greenville, and any time it is convenient they urge the members to partake of one meal either breakfast, luncheon or dinner without previous arrangement or notice in parties, single or double.

Hotel Reservations

The Committee on Hotels of which Dr. George R. Wilkinson of Greenville is the chairman, urges that the members of the Association write immediately to the hotels of their choice for reservations. The hotels will do everything possible to accommodate the doctors and their families but it is highly important that they be notified at an early date as to the number of rooms desired. Greenville is a very busy city, and while the hotels are numerous and most excellent, the demands from the traveling public are great at all times.

The Poinsett Hotel which will be headquarters the following are the rates: Single rooms with bath at \$2.50; (2) people to a room—\$2.00 each; and 3 or more people to the room \$1.75 each.

The Poinsett Dining Room is featuring a very high class Dining Room service at popular prices. Club breakfast at 35c and up. Business men's

luncheon, at 65c; and a blue plate dinner in the evening at 90c.

The Ottaray Hotel quotes the following rates:

Single, without bath, \$1.50 per person.

Single, with bath, \$2.00, \$2.50 and \$3.00.

Double, without bath, \$1.50 per person.

Double, with bath, \$2.00 and \$2.50 per person.

This particular hotel states: "We believe that we shall be able to accommodate at least one hundred delegates, and we shall be glad to do all that we can to make them comfortable and happy while here."

The Imperial Hotel quotes rates for the Medical Convention, single rates as follows:

Connecting Bath—\$2.00.

Private Bath—\$2.50 and \$3.00.

They will make a special rate of only \$1.00 additional for the wives.

Fraternal Delegates

The following delegates will represent the Association at the meeting of the N. C. Society at Durham April 20-23: Drs. William Weston, Hugh Smith, J. W. Jervey, Kenneth M. Lynch, D. L. Smith, and Edgar A. Hines. From Georgia Medical Society: Dr. Stewart R. Roberts, Atlanta; Dr. A. G. Fort, Atlanta. From N. C. Medical Society: Dr. O. L. McFadyen, Fayetteville; Dr. J. L. Bruce Ward, Asheville; Dr. P. H. Pugh, Gastonia; Dr. J. W. McKay, Charlotte; Dr. S. Raymond Thompson, Charlotte; Dr. Alonzo Myers, Charlotte.

RARE PUBLICATIONS

A copy of volume I of the Medical Repository, which appeared in 1798 and which was the first American medical journal, is among the exhibits at the library of the University of Illinois College of Medicine in a display of early medical Americana. There are also a collection of the writings of Benjamin Rush, an autographed copy of a work by Marion Sims, a copy of the first medical dictionary compiled by an American, and Beaumont's book on digestion. Photographs of men famous in the medical history of the United States are also included.

Dear Reader:

The Journal and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogs and price lists of manufacturers, and can supply you information by return mail.

PANORAMIC VIEW OF WOMANS AUXILIARY

(Continued from page 106)

letter. She has the approval and encouragement of the medical men of her state to go forward.

We may expect to hear of more interest, as well as more auxiliaries in North Carolina. Mrs. W. B. Murphy is the President of this great State, and though we have before us no report for last year, we do know of their interest in the past and believe we may hear the number five at least doubled in their next report.

South Carolina shows thirteen counties organized, and Mrs. Mauldin was prompt to reply with assurances that better things are ahead for next year.

Mrs. L. M. Sackett now leads the one Auxiliary reported from Oklahoma, and we feel certain that others will be added before June.

On invitation from its President we had the pleasure of meeting with the Davidson County Auxiliary in Tennessee early in October, and found a splendid group of women earnestly desiring to serve in the most useful way. We found as a member of this Auxiliary the State President, Mrs. Milton S. Lewis. While only four auxiliaries are reported from Tennessee, they are the counties in which the largest cities are located. The distances are great between, but with the known interest and enthusiasm of the two counties visited, Davidson and Shelby, we are assured that Tennessee will bring to the next National Meeting a report filled

with accomplishments which tend to fulfill the aims and purposes of the Auxiliary.

While we were not fortunate to meet with the Texas Auxiliary, we did have a little visit with the energetic and charming president, Mrs. O. M. Marchman. Texas, the mother state of the Medical Auxiliary as it is now recognized, has thirty-five County Auxiliaries, and with a live, interested organization chairman such as Mrs. J. T. Moore is proving herself to be, others will be added before the next State meeting in May. Texas Auxiliaries have earnestly promoted a health program, always working shoulder to shoulder with the fine progressive men of the Medical Association, who, in turn, endorse the Auxiliary movement, and are unstinted in encouragement to further development of the organization.

At this time the minds of the Third District are directed toward the Keystone State and the City of Brotherly Love, and many are hoping to be wending their way to Philadelphia in early June that they may partake of the feast of inspiration and absorb the spirit of Auxiliary. Pennsylvania and her neighboring states have grown so marvelously that all are now anxious to sit at their feet and learn. This the third district is anxious to contribute its quota of honor paid to the medical men in whose interest we serve, and so it is with high anticipation that all plans are being made to be present at the annual meeting of the A. M. A. June 8-12, 1931.

Here

is one of the advertisements of The Sugar Institute

THE advertisement reproduced here is one of the series appearing in newspapers throughout the country. In order to keep the statements in accord with modern medical practice, they have been submitted to and approved by some of the leading authorities in the field of human nutrition in the United States. The Sugar Institute, 129 Front St., New York.

**Between-meal
fatigue is a signal
to eat
something
sweet**



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sugar is ready at once to new vigor.

Appropriate food for snacks can be had in fountain beverages, cream, candy and cakes. For children at home from school, sweet and flavored milk shake and butter spr with sugar are recommended. Most foods are more delectable and nourishing with sugar.

The Sugar Institute.

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The Journal

of the

South Carolina Medical Association

VOL. XXVII.

GREENVILLE, S. C., MAY, 1931

NO. 5 1935

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Mead Johnson & Company have to depend upon the physician to specify MEAD'S because they do not advertise their products to the public, either directly or through merchandising channels.

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"It is worth while specifying Mead's"

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Associates

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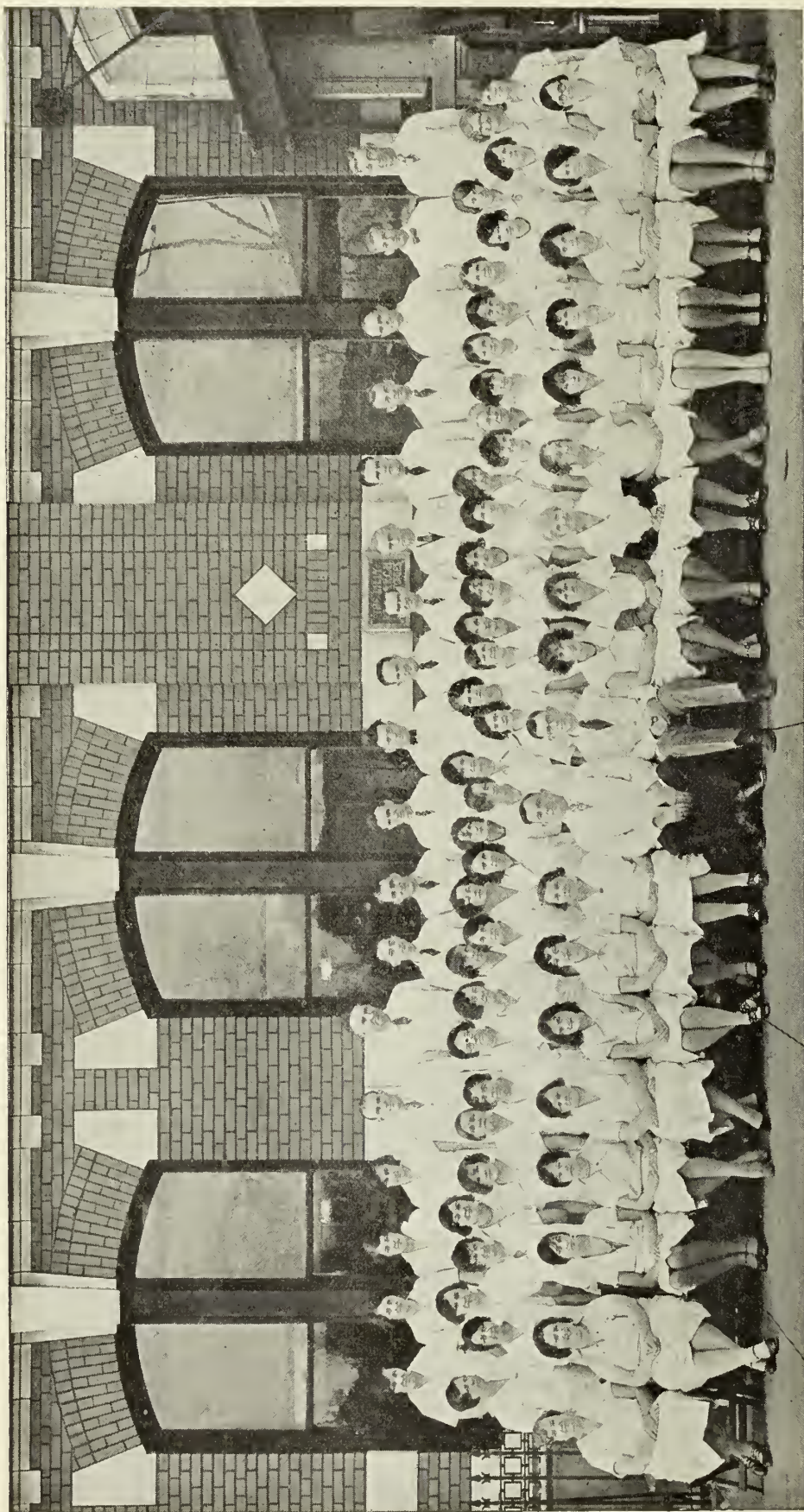
P. S. Several booklets, helpful in prescribing liquid and soft diets, diabetic diets, diets for anemia, reducing diets and convalescence, may be had by mailing to us the coupon herewith. We should appreciate the opportunity of sending them to you.

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The Journal

OF THE

South Carolina Medical Association

Published Monthly Under Direction of the Board of Councilors.—Annual Subscription, \$3.00.

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PUBLIC HEALTH

B. F. Wyman, M.D., Columbia, S. C.

EDITORIAL

COMMENTS ON THE GREENVILLE MEETING

We try to think that each meeting of the State Medical Association is the best one ever held. The truth is that in the eighty-three years since the first meeting there has been a vast improvement along all lines and each succeeding meeting has some special features worthy of marked commendation. The last meeting in Greenville was no exception to this. The attendance including the public health workers and the Woman's Auxiliary and visitors numbered about five hundred. For an Association with less than one thousand members such a record is worthy of more than ordinary notice. To the President, Dr. Kenneth M. Lynch of Charleston, is due the credit for the prompt and orderly dispatch of the business of the House of Delegates and of the Scientific session. Never before has the House of Delegates concluded its sitting in two hours as was the case in Greenville. This was a splendid beginning for the convention. The delegates

were spared the fatigue and loss of sleep resulting from an unusually long night session of the House of Delegates. Coming from considerable distances, arriving late in the afternoon, getting a hurried meal in order to be ready for the opening of the House of Delegates at 8 p. m., makes it highly desirable that a short session follows. The program committee of which Dr. Hugh Smith of Greenville was the Chairman estimated accurately the proper number of papers that could be read in the time allotted. This plan provided a time and a place for every man on the program to have the opportunity to present his paper just as it should be. In this way the essayist had a good hearing and the President saw to it that he did not overstep his limits and thus the next man to follow had a fair show for his paper. All of these factors militated in the direction of a satisfactory conclusion of the proceedings in so far as it was humanly possible to do so. Dr. Lynch was peculiarly fortunate in the selection of the guests from outside of the State. At the

last moment an entirely unforeseen contingency arose which necessitated that both of the guests were forced to appear on the last day of the convention. Even so, everybody joined in and remained over to hear them and thus the morning of the last day never opened with a finer attendance in the whole history of the State Medical Association. The Secretary's report disclosed an enrollment of about eight hundred and fifty members. The financial report of the Treasurer indicated a satisfactory condition of the Association and Journal. The various committees had little to offer in the way of constructive measures but this does not mean that careful thought had not been given to the work assigned them. There was a note of discouragement with reference to the attendance at the Pathological Conference over previous years. It may be possible that some other hour than early morning should be assigned to this important part of the program. We wish to make the same comment about the time honored early morning hour for the President's address. Less than half of the members in attendance on the convention are present. This certainly is not inspiring to one who has given a year of preparation to his address. It would seem to be feasible to make the President's address a special order for twelve noon at which hour the highest point of attendance and interest may be noted. We wish to say a word about the clinics. At the Greenville meeting the program committee expended unusual effort to make the clinics on the last afternoon attractive and according to our information the success was not in accordance with the efforts put forth from an attendance standpoint. This brings up the question as to whether or not such an Association as ours may look forward to any form of clinic as desirable. We have long maintained that the clinics should be a major function. Some State Associations are now giving the first half of each day to clinics. In certain cities, particularly Charleston, where the Medical College is located such a plan can be readily carried out by our State Association. After many efforts from various angles it appears that it is practically impossible to hold the men over the entire afternoon of the second day. The selection of Columbia for the next place of meeting assures a large attendance in

1932. The new auditorium will provide every facility necessary. The additional hotel accommodations will meet every demand. The capital city now has the largest medical society in the State. Columbia is therefore a medical center of great importance. The social attractions are always all that one might hope for. The Woman's Auxiliary to the Columbia Medical Society will cooperate to the fullest extent in the entertainment of the Association. The last meeting of the Association held in Columbia numbered about seven hundred. With the above inducements to look forward to even this number may be increased.

PRESIDENT ELECT J. R. YOUNG

The Presidency of the South Carolina Medical Association is a great honor worthily bestowed annually. In the elevation of Dr. J. R. Young of Anderson to the high office of President Elect the House of Delegates made no mistake. The entire profession in South Carolina esteems Dr. Young as one whose record has been known of all men to be exemplary in his private life and in the various public capacities in which he has been called upon to serve, his leadership has been of a high order. Dr. Young is an able surgeon, a continuing student of medicine in its broad sense and to organized medicine he has given of his best on numerous occasions. Dr. Young has contributed notable papers to the programs of the State Association over a period of many years. During the time in which he will be President Elect he will visit as occasion demands the various constituent societies and study first hand their needs and when he takes office as President will be in position to direct the destinies of the Association in the same capable manner in which he has performed all of the manifold duties hitherto devolved upon him.

FREE SCHOLARSHIPS SOUTHERN PEDIATRIC SEMINAR

There will be at least seven scholarships available during July and August at the Southern Pediatric Seminar for South Carolina doc-

tors. These scholarships provide both tuition and board. Applications may be made direct to Dr. D. L. Smith, Registrar, Spartanburg, S. C. or to the Secretary of the State Medical Association. The policy of the Seminar is to award the scholarships to general practitioners in the smaller towns and rural districts who are interested in both preventive and curative pediatrics. The courses are given at Saluda, N. C. where during the summer months a large and varied clinic may be utilized. This seminar is one of the most noted institutions of its kind in the United States, having on its faculty professors of practically every University in the South. The attendance every year numbers around one hundred physicians from all parts of the South. Applications should be sent in immediately.

UROLOGICAL SOCIETY PLANS PEDIATRIC PROGRAM

At the recent meeting of the Urological Society of South Carolina it was decided to publish a series of articles in the Journal emphasizing the importance of urological procedures in pediatric practice. The Society plans to have some of the leading specialists in urology in this country contribute to their special department in the Journal. The first number appears in this issue by one of our own well known urologists, Dr. Milton Weinberg of Sumter. It is confidently expected that our readers will turn with increasing interest to this series of articles as they appear from time to time. The Journal is indeed fortunate in having such a splendid outlook in this particular department for the coming year.

PRESIDENT CHARLES A MOBLEY

Dr. Charles A. Mobley was elected President Elect at the Florence meeting May 6, 1930. Dr. Mobley has rendered good service in all the capacities in which he has been called upon throughout his entire professional life.

Dr. Mobley was born in Rock Hill, South Carolina, March 31, 1888. He attended the graded and high schools in Rock Hill and also the Catawba Military Academy there. He continued his education at the University of



Charles A. Mobley, M.D., President South Carolina Medical Association, 1931-32, Orangeburg, S. C.

Tennessee and entered the Medical College of the State of South Carolina in 1906 from which he graduated in 1910.

He began practice at Van Wyck, Lancaster County, South Carolina, remaining there three years. He then moved to Rock Hill and was associated with the late Dr. W. W. Fennell, a well known surgeon. Shortly after going to Rock Hill he quit general practice, specializing in Urology, and was genitourinary surgeon and assistant in general surgery to the Fennell Infirmary for six years.

Dr. Mobley was elected a Fellow of the American College of Surgeons in 1918, receiving the fellowship degree in 1919, there being no 1918 meeting due to the influenza epidemic.

During the World War Dr. Mobley rendered valuable service as a member of the Medical Advisory Board at Greenville, South Carolina.

Perhaps the outstanding epoch of his life's work is centered around the move to Orangeburg in 1919 where about September 1st of that year he opened the Orangeburg Hospital. This

institution immediately took front rank in the large section of South Carolina in which it is located. It numbers more than fifty beds and is rated as a well equipped institution.

Dr. Mobley's ancestors have been identified with upper South Carolina since about 1750. On December 21, 1914, he married Miss Susie Bailey of Edisto Island, South Carolina. Their

son, Charles A. Mobley, Jr., is a mechanical engineering student at the University of Alabama.

During the year in which Dr. Mobley has been President Elect he has visited quite a number of the constituent medical societies and already has become familiar with many of the details of the State Medical Association.

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, MARCH 10th, 1931, at 8:30 o'clock.

The meeting was called to order by the Vice-President Dr. Henry W. de Saussure.

Present: Doctors; A. E. Baker, Jr.; Banov; Beach; Boette; Burn; Byrnes; Cain; Cannon; de Saussure; Jackson; W. H. Johnson; McCrady; Martin; Palmer; Prioleau; Ravenel; Richards; Rutledge; Sanders; W. A. Smith; Sughrue; Taft; Whaley; I. F. Wilson; Huggin; Woods. 26

The minutes of the meeting of February 24th were read and confirmed.

The Secretary stated that Dr. John W. Wieters had requested that his letter of application for membership in the Society be withdrawn. It was moved, seconded and carried that the request be granted.

The Secretary stated that he had been requested by the Program Committee to state that there were several dates unfilled on the program for the balance of this year, and that the Committee would like to have members of the Society submit titles for papers to fill these dates.

The Scientific Session was called at 9:00 P. M.

Dr. J. J. Ravenel and Dr. T. H. Byrnes presented a case of cystic degeneration of both kidneys. This was discussed by Doctors Taft, Rutledge, Whaley, Sanders, Prioleau and Smith, Dr. Ravenel closing.

Dr. T. H. Martin reported a case of ruptured gastric ulcer, simulating appendicitis. This patient was operated on and recovered. There was no discussion.

There being no further business, the meeting adjourned.

W. Atmar Smith, M. D.
Secretary.

ANDERSON COUNTY MEDICAL SOCIETY

The regular meeting of Anderson County Medical Society was held at the John C. Calhoun Hotel, Wednesday, February 11th, 1931, at 12 noon. Society called to order by the President, Dr. Frank M. Lander.

Dr. Frank Lander read a very historical memo of Dr. Benjamin Franklin Brown, a pioneer physician of the County. A piece of wood has been obtained from one of his chairs with which this master of medicine started housekeeping. From this has been made in his son's shop, Dan Brown of this City, a gavel which Dr. W. H. Nardin presented to the Society.

The minutes of January meeting were read and approved.

Under the head of business, Dr. C. S. Breedin made motion that we send Dr. J. N. Land to Columbia, Society to pay all expenses, to interview legislaturemen in regard to appropriation of charity funds for Anderson County Hospital, motion seconded, discussed, voted on and rejected.

Three censors were appointed—Dr. J. B. Townsend, two years, Dr. J. N. Land, four years, Dr. H. H. Harris, one year. Four physicians appointed to hold pre-natal clinics during the year, Dr. C. S. Breedin, Chairman, Dr. E. E. Epting, Dr. Frank Wrenn, Dr. C. H. Young, and Dr. W. T. Lander.

Scientific Program—Dr. W. B. McWhorter gave an illuminating lecture on "Strabismus." He stated that in many cases it is now possible to correct this condition by means of an operation, or in some cases through the use of proper glasses. Treatment should begin when the patient is about three years of age.

Dr. E. E. Epting read an interesting paper on "Pre-natal Care." He asserted that this line of work is being stressed in health work in Anderson County this year.

Members present, twenty-seven. Visitors, one.

D. J. Barton, M. D.
Secretary.

Fifteen doctors from South Carolina were among the speakers at the recent meeting of the Southern Medical Association, as follows: Dr. J. Richard Allison, Columbia; Dr. George Bunch, Columbia; Dr. T. B. Craig, Greenville; Dr. William A. Boyd, Columbia; Dr. Roger G. Doughty, Columbia; Dr. William Weston, Jr., Columbia; Dr. Kenneth M. Lynch, Charleston; Dr. Roe E. Remington, Charleston; Dr. J. Heyward Gibbes, Columbia; Dr. Robert Wilson, Charleston; Dr. John F. Townsend, Charleston; and Dr. J. W. Jervy, Greenville.

Dr. D. L. Smith of Spartanburg, was elected Chairman of the Section on Pediatrics of the Southern Medical Association, at this meeting.

Dr. Edgar A. Hines, Jr., Resident Physician at the Spartanburg General Hospital and Assistant to the Secretary Editor of the Journal, has returned from a visit to the Mayo Clinic, Rochester, Minn.

ALERT MEDICINEBy**Kenneth M. Lynch, Charleston, S. C.*

(Presidential Address, S. C. Medical Association, 1931).

As a mark of the changes which have come to alter the meaning of the term medicine the British government has recently been under the necessity of defining the field which is now to be included. It has attempted to do so in a definition to the effect that medicine deals by no means only with the cure of disease but it deals with the proper development and right use of the human body in all conditions of activity and environment, as well as with its protection from disease and accident, and its repair.

Within the limits of this comprehensive definition of the province of modern medicine may be found the reasons for the number and variety of questions and problems now perplexing the profession.

The first part of the definition is an expression of such familiarity that it has become hackneyed. The time was, in the recent past, when curative medicine constituted the whole. For a complete vision of modern medicine it is necessary to not only have this well in mind but also that in the era when this was a fact the field of curative medicine held but a small part of what it now includes. At the same time that we have been actively reducing the number of diseases to be cured we have been increasing the volume of measures to be used against those which now remain, to such an extent that curative medicine is now of much larger proportions than it ever was. It may be well appreciated that while the proportion of kinds of disease encountered by a practitioner of curative medicine has changed materially within the period of activity of many still in practice the scope covered has not become smaller but greatly larger, and that so far as the main body of the profession is concerned curative medicine is and will probably remain indefinitely the major activity in medicine.

The truth of this conception of curative

medicine is not altered by the fact that some of the major troublesome problems which confront us today concern this field. In the manner of conducting the practice of medicine which has become prevalent of recent years, because of the increasing scope of curative medicine and its resulting breadth of specialization, we have encountered economic problems which are not solved to the liking of the profession or the public, and about which we are being harassed by those who would solve them for us on grounds which do not take the special character of service into account and which, therefore, are not only not acceptable but are at times provocative of resentment.

Cooperative practice by associated physicians is the common means of bringing together the varied character of medical service to be rendered by individuals. We call this group practice when physicians bind themselves together in one way or another in their private work but when no business ties exist among cooperating physicians they may even resent the appellation of group medicine. This appears to be by reason of a belief that group clinics have indulged in certain commercial practices which are distasteful to high-minded physicians. Also, many who practice the same kind of medicine in cooperation with chosen colleagues apparently believe that their own interests are better served by avoiding actual business partnership.

Undoubtedly a large percentage of physicians, particularly those of larger towns and cities and those who work mainly in hospitals, are practicing group medicine, at least in principle. It seems to be well demonstrated that the practice of organized medicine is not only productive of service to patients which is more coordinated and conveniently administered at less cost to them, but that actual business-like organization among physicians allows the accomplishment of better work with less worry and effort and with greater general compensation which is subject to more appropriate distribution.

Within the profession there are some who oppose such organized practice on the grounds of possible disturbance of the age-old relation of individual patient and doctor. This ob-

*Read before the South Carolina Medical Association, May 6, 1931, Greenville, S. C.

jection is in some an honest one; in others it is based on selfish motives. It is not essential that this relation be disturbed.

There is a growing popular demand for such organized service and it appears that the failure of a large part of the profession to take advantage of the good which is apparent in organized medical practice in private work as well as in charity and hospitals is one of the major stimuli in the apparent drift toward what is usually called state medicine. A wide movement on the part of the profession itself toward such organization might forestall a demand for the creation of such service under other control than that of medicine itself.

Turning to the main consideration in the British government's definition of medicine—that it deals with the proper development and right use of the human body in all conditions of activity and environment, as well as with its protection from disease and accident, and its repair—we find reason for deep concern as to how the profession is to keep control of the broad field if this definition is to become of practical acceptance, as it apparently must.

Within this lies a conception of a spread of preventive medicine to boundaries heretofore largely unthought of and probably not now to be visualized.

I need only to refer to two largely uncultivated fields, those of the sciences of nutrition and of psychiatry, to bring to mind the wealth of ignorance in the very fundamentals of the preservation of health of the body and the mind with which we are still surrounded.

At the present time we think of preventive medicine largely in terms of breaking the chain of sequence in the transmission of infection—and we have been disappointed many times in its impracticability. We have had only an occasional glimmer of light on the prospect of something farther back, something nearer basic than that, in controlling infectious disease. We have also vaccinated against the contraction of infection, and are still in trouble to make out vaccinations acceptable by the people.

Our knowledge of the relation between mal-nourishment and disease is not such that

we can speak with certainty even about those conditions, such as scurvy and rickets, concerning which we commonly express ourselves so confidently. To speak of feeding in its relations to other major conditions of disease which might be named or even to the control of structural development of the human being is only justifiable at the present in an acknowledgment that they are at least related in our ignorance of their fundamentals. When we call to mind the fact that the honey bee can vary the treatment, apparently the feeding, of its larval young so as to develop at will a fully matured female organism in the Queen bee on the one hand or an unsexed female worker on the other, it is not unscientific to speculate on what the human might do in assuring proper conditions for developing its young and preventing the occurrence of deformities and of weaknesses during intra-uterine life. Pre-natal care, when attended to at all, is now constituted largely in the interest of the mother, that she may carry on through the period of pregnancy and delivery in a healthy state. In the scheme of nature normal motherhood is an incident in the main event of the production of fit offspring, and pre-natal care will come to have more reference to the proper condition of the child for its entry into the external world.

It is particularly appropriate that such matters should be called to mind here for the purpose of recognizing the public participation which this State has undertaken in the study of nutrition, and that complacency in the Profession might well lose to it the guidance which should be in our hands, might even nullify this splendid beginning or cause it to be side-tracked into unworthy channels in which its scientific purpose would be vitiated or destroyed.

In the large territory of mental hygiene we have made so little progress that there are not more than a figurative handful of us who even understand the language of the few who have undertaken to enter it. For one of the ignorant to speculate on the content of this province of the mental being, of thought, of personality, and of what we may come to know about the reciprocal relations of the mental and physical being, is largely unproductive but it at least brings thought of

what may be in store in governing the relations of individuals in the social body and in fitting them to places which they can best fill in the scheme of life.

At the present we are trying to standardize the human animal, as we would an inanimate machine, and we are actually practicing standardization and mass production in our educational system, without serious thought of the individual characters and capabilities involved. Parents are demanding that their children be educated at public expense to qualify for places which they could not fill even if such places for all could be found. Fearless and thinking educators and even other people profess the futility, wastefulness, and ultimate disappointment involved in such a program.

In any serious consideration of the relation which medicine has assumed toward the proper development and the right use of the human body in all conditions of activity and environment mention of hypertensive disease can hardly be avoided.

The statistical calculation that during the past fifty years the average duration of life has increased by about fifteen years covers to casual examination the fact that the span of life after forty-five has not been lengthened. The saving has been in childhood and not in adult life. In fact it appears to be true that mature adult life is actually shortened in American civilization. Actually life has not been lengthened but perhaps shortened. This means that we are saving young people from infectious disease and bringing them into maturity with perhaps less sickness—and greater general fitness for productivity, but it also means that we have not been able to capitalize that accomplishment in the fruits of ripened maturity. We are seeing our most promising products fall at the time when civilization stands to profit most by the culmination of the works of their lives and there has been no improvement in this.

Hypertensive disease has become a national state, affecting the well being of the people to the extent that it is no longer only a matter relating to the private practice of medicine but is in reality a public health problem, still in the stage of fundamental research.

To enter into further discussion of these

and of other major problems, such as the influence of heredity, or the menace of cancer, perhaps might create an impression of pessimism contrary to a real feeling of optimism about the outcome which is as certain as it is that the profession is the agency responsible for the prolongation of life of our young through a more healthy and happy duration in the present generation over the past.

In our pride over what has already been done we are a bit inclined to look upon a display of active interest by any other agency than medicine itself as presumptuous. We are too much inclined to intolerance of the participation of laymen in medical affairs. We are touchy about any real or fancied encroachment on our territory.

That there is any serious disposition to disturb the control of the whole of medicine by the profession I sincerely doubt. There is, however, an intense and growing interest in the public and in various agencies of it to bring about more activity in solving the live problems, both professional and economic, of preventive and curative medicine. Failure on our part to take the directing lead or to give evidence of full cooperation in these movements has been and will be taken as selfish or headstrong balkiness.

Failure of leadership or blunt disagreement will take control out of our hands and will not only allow but will demand an extension of public medicine. The exhibition of a spirit of guiding cooperativeness should preserve our position of medical advisor and supervisor.

That socialization of medicine in some form and to some extent seems inevitable to close students of the present trend is apparent. That it is the bugaboo which some profess to see is not necessarily true. Whether it may be or not is dependent on the participation of the profession. The fear which most of us have of "state medicine" is that it may dull the stimulus of individually felt responsibility to give the best service possible not only to the patient but to the advancement of medical knowledge. The fear which some undoubtedly have is that the opportunity of individuals to advance their own personal interests will be restricted. The latter is no more than a selfish interest and will have no

bearing on the outcome. The first is basic unless the control of medical service remains within the profession itself. If a state of public medical service may be developed wherein the profession itself would be the judge of the character of service rendered, the responsibility of the individual to give the best would be even more definite than now, when the physician is largely responsible only to those who are incapable of judging the quality of service rendered.

In such an outlook medicine would have no fear; that would be shifted to the inefficient individual.

We can visualize one form of "state medicine" in which individual effort would be stifled and the progress of medicine stringhalted. Another kind can be visualized in which progress in knowledge and ability of the individual and of the whole would be stimulated.

As a means of preventing the development of the former the profession has largely taken refuge in fearful prediction of dire calamity which would result: there have been few, if any, to champion the latter, at least to the extent of assuming aggressive leadership in developing a broad program of medical readjustment to accord with the times. We

have set ourselves mainly to block the encroachment of any lay influence in medical territory and to maintain in use medical machinery which has become inadequate to the extent that it is apparent to the laity.

Taking a page from military annals, the best defense is an active offense. The nature of an adequate and inclusive plan of an aggressive nature by medicine itself has not yet been formulated, and it may not be necessary or even possible for it to take the form of a definite unified plan of action. The main essentials during this time of study are that the profession shall not blind itself to the fact of an ever changing condition, change which does not alter the fundamental principles involved in giving medical service but by which their application may be subject to revision, and that we shall not hold back in the traces against leads which we believe will carry us into wrong paths but shall keep the leadership ourselves, that we shall keep uppermost in our purposes the careful preservation of our position as medical advisor and as supervisor of the whole of medicine, no matter how broad the conception of the medical field may be, in order that continued developments may occur naturally, in the hands of those who can best guide them.

ORIGINAL ARTICLES

*THE PRESENT STATUS OF VACCINE AND NON SPECIFIC PROTEIN THERAPY

*By John A. Kolmer, M.D., D.Sc., LL.D.
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*—From the Research Institute of Cutaneous
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of the Graduate Hospital of the University of
Pennsylvania.*

While vaccines have been used for the treatment of disease for over twenty-five years it is still a difficult task to express an accurate unbiased opinion of their scientific value. Even a casual review of the enormous literature leaves one with the impression that the attitude of the physician toward vaccine therapy may have influenced the results and reports in at least some instances. Thus some appear to have secured uniformly good therapeutic effects while others have reported poor and indifferent results with approximately similar vaccines and technic. And this psychological factor apparently exerts an important influence among the laity in that those who have great faith in vaccines almost invariably secure better real or imaginary therapeutic results than those who have little or no faith in this form of treatment although this attitude is not infrequently justified by the confidence instilled by those physicians whose results are much superior to the average by reason of a superior knowledge of the subject.

This however, refers more particularly to vaccines and non specific protein agents in the treatment of disease, since there is a remarkable unanimity of opinion on the value of vaccines in the prophylaxis of many diseases

and especially small-pox, diphtheria, typhoid fever, anthrax, etc. And indeed insofar as vaccines in the treatment of disease are concerned it may be stated at the outset that there must be something of real merit in this therapeutic field to have had vaccine therapy survive all the defective technic and abuses committed in its name during the past several decades.

The Effects of Vaccines

The administration of a vaccine is supposed to be followed by specific and non specific effects, the first referring to the production of antibodies and the latter to changes in the leukocytes with the elaboration of bactericidal substances, the production of leukocytosis, fever, and similar changes.

But micro-organisms vary a great deal in their capacity for producing antibodies. Thus the viruses appear to possess this property in high degree while other organisms like *Spirocheta pallida*, the gonococcus and tubercle bacillus possess much less activity in this particular.

In general terms prophylactic immunization depends largely, if not almost entirely, upon specific antibody production whereas in therapeutic immunization the non specific effects may be of considerable secondary importance and even account for all or almost all of therapeutic improvement.

Importance of Methods for Preparing Vaccines

But before passing in review personal opinions of vaccines in the prophylaxis and treatment of disease it is advisable to first lay proper emphasis upon certain factors concerned with their preparation.

In a general manner vaccines of living bacteria of reduced or modified virulence apparently produce the highest degree of immunity. This is shown by the results of cowpox vaccination against smallpox and also by the results of vaccination against rabies and anthrax by the original methods of Pasteur. Indeed it would appear that vaccination against tuberculosis is only possible

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with vaccines of living tubercle bacilli of reduced virulence as employed abroad by Calmette and Guérin. For obvious reasons however, living bacteria are not generally employed although the principle is well established and constitutes a goal for future efforts since ways and means may be worked out for the preparation of living vaccines of staphylococci, streptococci, pneumococci, typhoid bacilli and other pathogenic microorganisms.

Apparently the soluble or exogenous toxins rank next to living bacteria in vaccinogenic activity and whenever possible should always be included in the preparation of vaccines. This is shown by the remarkable success attending vaccination against diphtheria with toxin-antitoxin or toxoid as well as by a certain measure of success in immunization against scarlet fever and the improved results with toxins or culture filtrates of staphylococci in the treatment of these infections.

It is now known that many of the pathogenic bacteria produce some exogenous or soluble toxins in appropriate fluid media and these as well as other soluble antigenic substances should be utilized as much as possible. Some of these toxins are destroyed by heat and even by preservatives like phenol or tricresol, so that ordinary heat killed vaccines, which are so commonly employed, may be devoid of these desirable immunizing agents.

Furthermore, it would appear that vaccines sterilized with phenol, tricresol or some other chemical agent possess more vaccinogenic activity than heat killed vaccines and for these reasons I abandoned the latter several years ago in favor of the following methods: The organism is cultivated in a suitable broth medium for four to five days, the minimum time required for toxin production. If a staphylococcus vaccine is being prepared the broth culture is now passed through a sterile Berkefeld filter and the filtrate employed as a vaccine without heat or preservatives in small and cautious doses. If the vaccine is being prepared for some other organism, the unfiltered broth culture is sterilized by the addition of tricresol in concentration of 0.5 percent followed by dilution with sterile saline solution to the desired concentration. Such a vaccine contains the toxins along with the

chemically killed organisms and while its appearance is not as good as ordinary saline suspensions, yet I am convinced that the therapeutic properties are much better. In some instances a portion of the broth culture is filtered as described and the desired number of chemically-killed organisms subsequently added in order to avoid too high dilution of the toxins.

Of particular importance, however, are accurate bacteriological diagnosis and the matter of securing the organisms of primary infection for the preparation of vaccines. In other words it makes little or no difference how carefully or by what method a vaccine is prepared, there can be but a minimum of specific effects or none at all if the real organism or organisms of infection are lacking in the vaccine. For example cultures of discharging ears on plain agar may show nothing but staphylococci, diphtheroid bacilli or *B. pyocyaneus* and miss entirely an underlying pneumococcus or streptococcus. It is true that a vaccine of the former secondary organisms may produce some non specific therapeutic effects but it is always likely that a vaccine incorporating the primary or more important organisms would yield a much better result. For this reason, well prepared mixed stock vaccines may give better results than poorly prepared autogenous ones but the principle involved is that the outcome of vaccine treatment under such circumstances may be nullified at the very outset and before it is even begun, by poor technic and failure to obtain in culture the important organisms. The success or failure of vaccine therapy may not rest therefore, in the hands of the laboratorian preparing the vaccine but rather in the hands of the physician making the culture.

Autogenous Versus Stock Vaccines

As a general rule well prepared autogenous vaccines are always to be preferred to stock vaccines for treatment. It is true that stock vaccines must be usually employed for prophylactic immunization and sometimes for treatment as well because of the great difficulty or impossibility of preparing autogenous ones as notably in tuberculosis and gonococcus infections. But so many pathogenic organisms occur in more or less well

defined immunologically specific strains like pneumococci, streptococci, gonococci, staphylococci, typhoid and colon bacilli, that autogenous vaccines are always more likely to yield the maximum of therapeutic effects. Furthermore autogenous vaccines have the advantage of freshness which is sometimes a matter of importance since toxins and other bacterial products of antigenic value may deteriorate upon standing and especially at room temperatures.

Importance of Route of Administration

As a general rule vaccines are administered by subcutaneous injection on the assumption that absorption will follow with stimulation of the bone marrow or some other tissue with antibody production.

But within recent years it has been shown that the skin is a much more important organ for antibody production than hitherto surmised and for this reason the intracutaneous injection of vaccines in approximately one-tenth of their subcutaneous doses, has been observed in many instances to produce more antibody production than subcutaneous, intramuscular and even intravenous injections. Indeed I believe that the intracutaneous route may be the one of choice for the administration of typhoid, staphylococcus and other vaccines as shown by Tuft in my laboratory.

Furthermore it may be that antibody production occurs primarily in the tissues directly infected rather than in the bone marrow and other lymphoid tissues as so commonly believed at present. If this is true the local application of vaccines as advocated by Besredka may yield a better immunizing response than subcutaneous injections and the method is well worthy of trial in the treatment of those localized infections to which local or topical applications of vaccines may be made by instillation or on gauze dressings. It is true that vaccines in the nature of Besredka's "antivirus," which are essentially filtrates of broth cultures cultivated for 8 to 10 days, may contain bacteriophage and that the latter is responsible for the therapeutic results rather than the local production of antibody by the infected tissues, but yet I am more inclined at present to ascribe the results to antibody pro-

duction and particularly since the recent investigations of Krueger and Northrup have shown that concentrations of bacteriophage to a therapeutic threshold may not be attainable in treatment of open wounds, fistulas and the like by local applications.

Indeed it may be that in the future we will learn that the method of administration and dosage of vaccines will depend upon the kind and nature of the infection rather than upon any single uniform method. For example the recent investigations of Ross have indicated that the oral administration of pneumococcus vaccine may yield the superior immunizing response but in general terms I am much impressed with the general superiority of intracutaneous injections and the local application of vaccines for eliciting in maximum degree the immunizing capacity of the skin and mucous membranes whereas intravenous or intramuscular injections and especially the former, appear to best elicit the non specific effects.

Vaccines in the Prophylaxis of Disease

If there is any reasonable doubt about the curative or therapeutic efficacy of vaccines there can not be any in reference to their prophylactic activity in many diseases.

Unfortunately not all pathogenic bacteria are capable of producing immunity by active immunization or, at least, we have not yet learned how to prepare and employ them. For example the gonococcus does not appear capable of producing a lasting immunity and the same is true of *Spirochæta pallida*. Some like the tubercle bacillus and *Spirochæta pallida* appear to engender immunity only by producing actual foci of infection and all attempts to produce immunity by vaccines of dead organisms have failed.

But marked success has attended vaccination against smallpox, diphtheria, typhoid and paratyphoid fevers and rabies along with a certain measure of success in immunization against scarlet fever, pertussis, cholera, plague, bacillary dysentery, pneumonia and the common cold.

I need not in this audience pause to extol the success of cow-pox vaccination against smallpox and especially by later-day improvements in technic, particularly the use of

potent virus kept at low temperatures and applied by the multiple puncture method. It is true that tetanus has sometimes followed but has been usually the result of secondary infection through scratching by the patient and the encephalitis of so obscure origin observed in Holland is fortunately absent from most other parts of the world including the United States. Suffice to state that any of us may readily and safely re-issue the challenge of the late Osler who stated some years ago that "I would like to issue a Mount Carmel-like challenge to any ten unvaccinated Priests of Baal. I will go into the next severe epidemic with ten selected vaccinated persons and ten selected unvaccinated persons. I should prefer to choose the latter—three members of Parliament, three anti-vaccination doctors, if they could be found, and four antivaccination propagandists. And I will make this promise, neither to jeer nor jibe when they catch the disease, but to look after them as brothers, and for the four or five who are certain to die I will try to arrange the funerals with all the pomp and ceremony of an antivaccination demonstration."

Toxin-antitoxin vaccination against diphtheria indeed promises to eradicate this scourge if we succeed in immunizing children of pre-school age or soon after admission to school. It is true that sensitization to horse serum results in a small percentage of cases but even this slight objection may be removed by the use of toxoid which appears to produce a lasting immunity more quickly although apparently not in quite as high a percentage of cases.

Furthermore the success of vaccination against typhoid and parathyroid fevers is beyond question although it is clearly understood that the sharp reduction of these diseases in the Army and Civil Communities is due in large part to improved hygiene with special reference to the filtration or sterilization of drinking water.

And the success of vaccination against rabies is also beyond dispute despite the occasional failures usually occurring in severe bites about the face where the period of incubation has been too short for immunization even by intensive methods of vaccination.

Unfortunately the original hopes for suc-

cessful vaccination against scarlet fever with three doses of toxin have not been realized but on the other hand there is a long history of some success in vaccination against this disease in Russia with vaccines incorporating not only the toxins of *Streptococcus scarlatinae* but the organisms themselves and the subcutaneous injection of the toxin alone in five doses commencing with 500 skin test doses and ending with about 60,000 is believed to confer an immunity of several years' duration in about 90 per cent of cases.

While vaccine prophylaxis in whooping cough has not met with a great degree of success up to the present time yet personal experience and available evidence indicate that the administration of freshly-prepared vaccines before infection and before the period of incubation in this disease is sometimes successful and when the disease develops among immunized children it usually runs a shorter and milder course with so much less danger of broncho-pneumonia as to make the procedure practical and advisable and especially in institutions for children and in large families of private practice.

Immunization against Asiatic cholera, bubonic plague and bacillary dysentery have also met with encouraging success although these subjects need not be dealt with here in detail because the first two do not occur in the United States at present. But just as soon as international travel by Zeppelins and aeroplanes is accomplished, as it promises to be in the next decade, we may expect the introduction of carriers into this country with the result that these infections may later have to be dealt with as public health measures.

But the "common cold" is always in our midst and presents a problem of first rate importance from the standpoint of prevention on account of its wide prevalence, economic importance and its tendency to predispose to chronic infection of the nasal accessory sinuses, tuberculosis and pneumonia. While the etiology is uncertain and while it may be due to a virus yet it would appear that the streptococci, staphylococci, pneumococci, influenza and Friedlander bacilli to be found in the nasal secretions after the acute initial discharges are certainly of considerable secondary importance with the possibility that

infection with them is favored by the virus or that indeed they may represent the primary etiological agents with a reduction of local resistance in the nose by exposure to cold or hot dry air as the primary factor of infection.

At any rate considerable difference of opinion exists on the value of vaccination against the "common cold" with vaccines of these organisms. For my own part I may state that autogenous vaccines or mixed autogenous and stock vaccines have proven of value in the prevention of colds in 50 to 60 per cent. of cases without polyps, hypertrophied turbinates or adenoids although the duration of immunity following the injection of 4 or 5 doses at intervals of 3 to 5 days has usually lasted only six to eight months but generally considered well worth while by the victims of frequent recurring attacks of this infection.

While vaccines of *B. influenza* alone have generally failed to immunize against epidemic influenza, yet mixed vaccines of this bacillus along with streptococci, staphylococci, pneumococci and *M. catarrhalis* have met with some success. In this connection it appears advisable to prepare a stock vaccine of strains secured in the immediate vicinity in which the vaccine is being employed as the bacterial flora may vary in different parts of the country.

Unfortunately the vaccine prophylaxis of pneumonia has not yet met with sufficient success to place the method on a practical basis. Probably this has been due to the many different strains of the organisms capable of producing the disease and especially to the very heterogenous group IV; also to the fact that immunity in pneumonia is but very slowly acquired even by attacks of the disease. But it is possible that newer methods of administering pneumococcus vaccines may improve the results later on. At any rate present day attempts toward vaccination against the common cold and influenza may not be without benefit in this direction.

It would also appear that polyvalent stock vaccines of the meningococcus may have some prophylactic effect in epidemic cerebrospinal meningitis and are worthy of further trial in epidemics of this terrible disease. I may also state that Dr. W. W. Amano and myself are

working on methods for vaccination against the dreadful streptococcus and pneumococcus meningitis secondary to sinus and mastoid infections and the results at present are very encouraging insofar as the prevention of experimental meningitis of the lower animals is concerned and especially in pneumococcus meningitis.

Vaccines in the Treatment of Acute Infections

The administration of vaccines in the treatment of acute systemic infections like pneumonia, surgical septicemia, typhoid fever, etc., has been debated a great deal in the past with a wide variation in opinion. Certainly there are no contraindications from the standpoint of adding to the patient's burden of toxemia because a small dose of vaccine does not carry any appreciable amounts of toxic substances. The opinion generally prevails that the patient is being immunologically stimulated as much as is possible or desirable but this is open to question. For example evidence is gradually accumulating to show that antibodies are primarily produced in the tissues directly infected and if this is true the intracutaneous or subcutaneous injection of a vaccine may bring into play the antibody producing capacity of the skin or subcutaneous tissues not otherwise being utilized for antibody production. Or the intravenous injection of small doses may produce certain non specific effects and especially the leukocytic changes, sometimes resulting in the therapeutic benefit to the patient.

At any rate it would appear that vaccines should be employed more frequently than hitherto in the treatment of some of the acute infections and especially by the administration of small doses at frequent intervals with due care against over-stimulation of the immunizing capacity of the individual.

Certainly there are no objections to the use of vaccines in the treatment of acute localized infections like otitis media, sinusitis, furunculosis and the like. Indeed I believe we frequently overlook a golden therapeutic opportunity by omitting vaccine therapy in some of these acute infections and especially those like otitis media and furunculosis which may become chronic and thereby reduce the

chances of successful therapeutic immunization.

Vaccine Treatment of Chronic Infections

Furthermore I do not share the general pessimism relative to the value of vaccines in the treatment of some of the chronic bacterial diseases although I hasten to add that my experience has been very largely with autogenous vaccines which, during the past several years, have been chemically sterilized and utilizing the toxins as described above.

Indeed chronic infections have long been the special field for the applications of vaccine therapy on the basis of the surmise that the infecting organisms have developed a tolerance or fastness toward the immunity principles of the host and that the tissues of the latter have developed a tolerance for the former and are capable of being stimulated into renewed antibody production.

As a general rule the vaccine treatment of infections of bone like para-nasal sinusitis, otitis media and osteomyelitis has met with many disappointments although excellent results are sometimes obtained and the effort is usually worth while. On the other hand the vaccine treatment of infections of the soft tissues is more likely to be successful as in the case of chronic furunculosis with a vaccine of staphylococcus toxins (filtrates), asthma due to allergic sensitization to bacterial proteins with special reference to the use of autogenous vaccines of streptococci, some infected wounds, etc. Unfortunately, however, the vaccine treatment of *B. coli* infections like pyelitis and cystitis has met with much less success although the treatment of chronic gonococcus infections of the male has been sometimes successful and especially with a mixed stock vaccine of gonococci along with an autogenous one of the secondary organisms although the vaccine treatment of vaginitis of adults and children has been almost uniformly disappointing.

Probably one of the most important fields for autogenous vaccine therapy is in focal infections. Altogether too frequently the removal of abscessed teeth and tonsils is depended upon alone for treatment whereas it must never be overlooked that secondary

foci in the joints, tendon and nerve sheaths, muscles, iris, etc., may be so well established as to be independent of the primary foci so that drainage or extirpation of the latter is without therapeutic benefit. In my opinion abscessed teeth and tonsils should be always subjected to very careful bacteriological examination with special reference to streptococci and the administration of an autogenous vaccine should be an important part of the follow-up treatment, constituting indeed, about all that can be attempted toward the eradication of the secondary foci on the basis of raising the patient's resistance to the infection by specific or non specific effects. And where there are several abscessed teeth for extraction it is my practice to have but one or two of the worst ones extracted followed by the preparation and administration of an autogenous vaccine for 4 to 6 doses before the balance of the teeth are removed as a means for raising immunological resistance and thereby affording some protection against acute exacerbations of secondary foci with special reference to the prevention of the dreadful bacterial endocarditis sometimes due to focal infection and not infrequently following the wholesale extraction of abscessed teeth.

Non Specific Protein Therapy

This is indeed a very large and important subject in itself difficult to summarize in a brief and concise manner. Suffice to state that it is still in large part upon a purely empirical basis and that what is known of the intricate mechanism involved usually inadequate for explaining the curious and sometimes exceptionally excellent clinical results following its use.

A large and bewildering list of agents have been included in this category although those mostly employed have been typhoid and *B. coli* vaccines and peptone by intravenous injection, Coley's fluid by intravenous, intramuscular or subcutaneous injection, tuberculin subcutaneously, sterilized market milk or various commercial preparations of milk proteins by intramuscular injection and homologous or heterologous sera, exudates and transudates by intramuscular or intravenous injection.

As a general rule constitutional reactions

of fever with or without chills and leukocytosis have been elicited as essential reactions of therapeutic value sometimes associated with reactions about the foci or infection.

While the mechanism is unknown, although numerous interesting theories have been proposed which space does not here permit reviewing, yet I believe it may be stated that a goodly part of the therapeutic effects may be ascribed to the fever and especially in the treatment of neurosyphilis and chronic gonococcus disease along with leukocytosis and other leukocytic changes resulting in increasing the non specific bactericidal qualities of the blood with an increase of the phagocytic activities of the leukocytes, endothelium and other tissues as well as promoting focal reactions of hyperemia with cellular and serous exudation.

It is to be carefully kept in mind however, that non specific protein therapy by intravenous injection is not without danger in the presence of chronic myocarditis and especially in the treatment of neurosyphilis, so that due care is required in the selection of patients and agent as well as in dosage and frequency of injections. Intramuscular injections however, are much less dangerous and permits a wider use of this form of therapy.

Chronic infections like recurring non tuberculosis iritis, gonococcus disease and especially pelvic infections of women, infective types of arthritis and neuritis, recurring erysipelas, neurosyphilis and other chronic diseases have been most frequently subjected to non-specific protein therapy and frequently with gratifying results although the effects and especially freedom from pain have been usually temporary rather than permanent. But even in acute bacterial infections like septicemia, pneumonia and typhoid fever, intravenous non specific protein therapy has been successfully employed and it is not unlikely that the results sometimes following intravenous injections of the heavy metals like mercurochrome, Pregl's iodine solution and others may be placed in this category on the basis of combining with the plasma proteins and altering them sufficiently *in vivo* for constituting foreign proteins.

Summary

1. There must be something of real merit in the vaccine prophylaxis and treatment of disease for this therapy to have survived all the abuses committed in its name during the past twenty-five years.

2. The prophylactic effects of vaccines are largely due to specific antibody production while the therapeutic effects may be due to both specific and non specific agencies.

3. Methods for the preparation of bacterial vaccines have an important bearing upon their therapeutic efficacy and especially in the treatment of disease.

4. Vaccines of living bacteria of reduced or modified virulence are probably most vaccinogenic although of limited application.

5. The soluble or exogenous toxins and products of bacteria rank next in vaccinogenic activity and whenever possible should be always incorporated in vaccines.

6. Vaccines sterilized by chemical agents are probably more vaccinogenic than vaccines sterilized by heat.

7. Methods are briefly outlined for preparing vaccines of bacterial toxins alone or with the addition of chemically killed organisms.

8. Accurate bacteriological examinations are of primary importance in vaccine therapy not only from the standpoint of diagnosis but more especially for securing the organisms of primary infection and importance for the preparation of autogenous vaccines.

9. The results of therapeutic immunization may be nullified at the outset by defective bacteriological technic resulting in the failure to obtain the organisms of primary infection.

10. Autogenous vaccines are to be preferred for therapeutic immunization because of the existence of immunologically specific strains of some of the pathogenic bacteria and because of the added vaccinogenic activity of fresh vaccines and especially those incorporating the exogenous toxins.

11. The route of administration and dosage of bacterial vaccines have an important bearing upon prophylactic and therapeutic immunization.

12. Intracutaneous injections of vaccines have sometimes engendered more antibody production than subcutaneous injections.

13. Vaccines have proven of great value in the prophylaxis of small-pox, diphtheria, typhoid and parathyphoid fevers and rabies. Some success has attended vaccination against scarlet fever, pertussis, cholera, plague, bacillary dysentery, pneumonia, the common cold and meningitis.

14. Vaccines do not materially add to the toxemia of acute generalized infections although they must be used cautiously and in small doses at frequent intervals to avoid over-stimulation of immunological resistance.

15. Vaccines are not necessarily contraindicated in acute infections where their administration may stimulate the immunizing capacities of the skin and other tissues capable of greater immunological response.

16. Vaccines are of special value in the treatment of acute localized infections.

17. Vaccines have frequently failed in the treatment of chronic infections involving bone but are more successful in the treatment of infections of the soft tissues and especially those produced by staphylococci and streptococci like chronic furunculosis and asthma due in part or whole to allergic sensitization to bacterial proteins.

18. Autogenous vaccines are sometimes of value in the treatment of chronic focal infections and especially in the treatment of the secondary lesions following drainage or extirpation of the primary foci.

19. The mechanism of curative activity in non specific protein therapy is unknown but is believed to be largely due to the production of fever along with quantitative and qualitative changes in the leukocytes resulting in an increase of the non specific bactericidal properties of the blood and phagocytic activities of the leukocytes, endothelium and other tissues.

20. Non specific protein therapy has been especially efficacious in the treatment of chronic focal infections, chronic gonococcus disease and neurosyphilis although the effects are frequently temporary rather than permanent. This therapy also has a field of application in the treatment of some acute infections.

POST-GRADUATE MEDICINE IN EUROPE

By F. Eugene Zemp, M.D., Columbia, S. C.

Since the World War the United States has undoubtedly shown more progress in medicine than any other country and has at last taken her rightful place as a leader in the Medical World. Post-Graduate work has also advanced to the same degree and now a number of our medical schools are offering excellent post-graduate work with well organized courses in the various branches of Medicine. Similar work may also be obtained through Fellowships at the larger clinics as; the Mayo, Cleveland, Rochester, and a number of others. Some of the larger hospitals have established Residence Physicians, for a period of one or two years, in a particular branch. Therefore, in our own country one can obtain post-graduate work equal to or superior to that in Europe. However, if one is desirous of studying abroad and acquiring foreign methods there are numerous places where one might go. Vienna and London are probably the two most popular. The work there is well organized and given in English.

VIENNA

Vienna has long held the title of the Medical Center of the World, and it is no doubt true that no other city attracts so many physicians from so great a distance. Courses are well organized in every branch of Medicine and are given throughout the year in English or German by the Professors of the University of Vienna in cooperation with the American Medical Association of Vienna. On arriving in Vienna it is well for one to taxi immediately to the cafe Edesong 9, Alserstrasse, Wien VII, where is housed, on the second floor, the quarters of the A. M. A. and join the Association. This is the rendezvous for all the doctors. Here too is located the office which arranges lectures, hours of instruction and so forth. Courses being offered at that time are posted on the various bulletin boards and are signed up for. An **Orientation man** is there to help you. As soon as a course is filled it begins. Most of them are limited from two to ten members and are from five to twenty hours duration. Tuition fee for one

taking about five hours work a day will average around a hundred dollars per month. Courses are given all over the city, for the most part in the clinics grouped near each and near the A. M. A., as; the Allgemeines Krankenhaus, Polyklinik, Wenckebach clinic, Herz-Station, von Pirquet clinic, Neurologic Institute, Kermanner and Eiselberg clinic. Also at the various hospitals as; the Elizabeth, Rudolph, Childrens, Hospital on the Wien, etc. Especially organized courses of ten weeks to three months duration are offered in Ophthalmology, Gynecology, Genito-Urinary, Internal Medicine, X-ray, and possibly additional subjects, being particularly suited for those who want to do intensive and well organized studies in some special branch in a relatively short time. Externe-ships are also offered for periods of six months to a year in various departments of the hospitals. Actual surgical experience can no longer be had in Vienna, but individual instructions in surgery and cadaver surgery is very good. Didactic work is given and you are allowed to visit large surgical clinics where excellent views may be had of the operations. English is spoken in nearly all the clinics and the surgeons talk freely of the methods employed as they go along. The treatment employed by Bohler for accident cases and the universal use of local anaesthesia is exceedingly good. One completing six hundred hours work in a continuous period of four months receives a Certificate and a Key from the A. M. A. With the aid of the Auxiliary of the A. M. A. one may get information about hotels, pensions, rooms, eating places, shopping, etc. Living expenses are considerably less than in this country. Whatever the motive is in going to Vienna, be it medical or otherwise, the delight of hearing the wonderful operas, concerts, and the experience of seeing the beautiful old castles, palaces, churches, and monasteries give a lasting satisfaction and one is never sorry that he chose Vienna.

LONDON

On arriving in London one should go immediately to Wimpole Street W. 1, and join the Fellowship of Medicine. There you will receive all the information desired in regards to post-graduate work. You will receive a

card admitting you to the clinics of the various hospitals given throughout the year, the type of clinic and name of the instructor of each. Special courses in Gastro-Enterology, Surgery, Diseases of the Chest, Gynecology, Cardiology, Pediatrics, etc. are given at stated times throughout the year at various hospitals. Special M. R. C. P., Evening Courses are also given at the Medical Society of London, Cavendish Square. Many other lectures and demonstrations are given throughout the year, which you may attend free of charge. The work in London is very good and the fees are very reasonable, but before going there you should obtain from the Secretary of the Fellowship of Medicine the time of year the particular kind of work you are interested in is given. Living expenses are about the same as they are in this country.

PARIS

There is plenty of good work going on in Paris, but I am not familiar with it. Knowledge of French will be a great asset. The American Hospital is a very large and beautiful building and it is possible to obtain an Interne-ship there for one or two years. It is not a teaching hospital, however, and that is to some extent a disadvantage. Under the auspices of the Association for the development of Medical Relations organized Post-Graduate courses are given every summer in the various hospitals in the various branches of medicine. Hospitals available for such study are; the Salpetriere, Charite, Cochin, Sainte-Anne, Amphitheatre d'Anatomic des Hopitaux, Herold etc.

From Friends, I learned that excellent post-graduate work may be obtained at Edinburgh in most any branch of Medicine. If you speak German you may obtain excellent surgical work in Berlin. Many also go to Budapest for surgery. Heidelberg speaks for itself. I was very much impressed with the work in Holland at the Hague and Leydin.

More detailed and definite information about some of these places may be obtained while in London or Vienna. If you have no definite information about the place you desire to go, then I would advise going to Vienna or London first where I feel certain that you will be very much pleased with the work there.

THE UROLOGICAL ASSOCIATION OF SOUTH CAROLINA

UROLOGY OF INFANCY AND CHILDHOOD

*By Milton Weinberg, M.D.
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Since the invention of the child's cystoscope in 1907, the progress of urologic methods in infants and children has paralleled that in the adult. However, the medical profession as a whole has not recognized this fact and is still rather luke warm and skeptical. Besides, there has been a misunderstanding on a large part of the profession as to the practicability of applying the same urologic procedures in children as is now universally accepted regarding the adult. There seems to have been developed in some quarters an antagonistic attitude due entirely to a lack of knowledge; and as a result, erroneous statements have been propagated concerning urologic examinations. Through this misconception, there has been spread the wrong idea that the usual urological procedures—cystoscopy, ureteral, catheterization, pyelography, etc.—are major procedures in children and are fraught with considerable danger. Beer, Stevens, McKay, Kretschmer, Lowsley, Butterfield and many other urologists have shown beyond doubt that the common urological procedures are safe in childhood, and should be carried out far more frequently than is now practiced. Urologists have shown that these procedures are better borne in children than in the adult.

In 1930 Beer reports cystoscopy for hematuria in a male child 15 weeks old. This examination disclosed a uric acid calculus which had not been discovered with the X-ray. He reports also the catheterization of both ureters in a male child two years of age. Kretschmer has cystoscoped a number of children under twelve months of age, the youngest child examined was a boy of 27 days. Catheterization of the ureters and pyelograms have been done without any harmful effects in infants as young as 29 days old. The writer cystoscoped and pyelogramed a child eight

months of age, thereby demonstrating a malignant tumor of the kidney.

In children under two years of age it is usually necessary to give a general anesthetic for the examination; and in some cases older children would also require it. It has been found, however, that very many children, especially girls above two years of age, do not require a general anesthetic and all that is necessary is a few drops of novocain in the urethra.

It is not the intention of urologists to advocate these procedures in all urinary disturbances with children. The same rules of common sense and judgment must be followed as should be done in the entire practice of medicine. The indication for such a procedure should be very carefully considered.

It is obvious that delay in recognizing diseases of the urinary tract in infancy is frequently unavoidable. Expression of all subjective symptoms is absent. Of course, the gross external malformations are, and have always been recognized from birth. In infants and children the gastro-intestinal tract is frequently reflexly affected. Until the child is old enough to give expression to its feelings, the general examination for masses and the examination of the urine may be made. Stains of blood and mucous on the napkins and odors are sometimes detected. An abnormal amount of urine secreted is sometimes observed. Crying and handling of the genitals during urination may be noticed.

Older children frequently complain of symptoms such as pain in the region of the kidney, burning, frequent urination, etc. Microscopic examination of the urine should be done routinely in the child as in the adult, and many cases of fever are found by examination of the urine to be due to an infection of the urinary tract. Tumefactions in the loin, abdominal distention may be easily noticed. Enuresis is the common symptom of childhood and is

sometimes found to be due to organic lesions. The underlying cause should be investigated. Congenital valves of the posterior urethra are sometimes found to be the cause of enuresis.

It must be borne in mind that diagnosis of urologic diseases in many instances in infancy and childhood cannot possibly be made in patients unless these urologic procedures are carried out. Urologists have demonstrated in making these examinations that the child is not infrequently found to have and is subject to very nearly all lesions of the urinary tract as found in the adult. In the Babies' Hospital, New York, the pathologist found lesions of the urinary tract in 117 cases out of 4,907 autopsies. Some of the urinary lesions of the adult have existed since childhood.

Pyelitis is very common among children, especially girls. Sometimes associated with it is stricture of the ureter, stone in the kidney and ureter. Tumors of the kidney, etc., are not infrequently found. Some of the other lesions found are abscess of the cortex of the kidney, carbuncle of the kidney, perinephritic abscess, diverticula of the bladder, contracture of the vesical neck, sarcoma of the prostate in the male, congenital valves of the posterior urethra, foreign bodies in the urinary tract, tuberculosis of the kidney, etc. Urinary disturbances of childhood are to a very large extent similar to those of the adult and the child should be examined in the same manner as the adult is. This evidently is the only way in which proper therapeutic measures may be instituted. The physician should never overlook the urinary tract in his routine examination of the child.

Intravenous urography has its place in

childhood and in selected cases may be used to advantage. As in the adult, it has only a limited field of usefulness and its application requires that same careful discrimination in the child as it does in the adult. A thorough knowledge of urologic conditions and procedures is necessary in order to evaluate the findings in intravenous urography.

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EYE, EAR, NOSE AND THROAT

J. F. TOWNSEND, M. D., F. A. C. S., CHARLESTON, S. C.

ANTERIOR SYNECHIA

In 1884 DeSchweinitz seemed to be thinking of what Posey expressed in 1898, That was, that the iris developed in segments rather than in a continuous circle. In 1912 Lindel stated that there were four accessory clefts besides the normal one, in human embryos, of 3.4 to 31.1 millimeters in length. Thus we see that iris clefts as we see them in life may represent states at which the normal development was prevented.

This prevention or lag in development may occur from inflammatory action (Deutermann), or from persistence of bands of vascular fetal membrane preventing the closure of the iridic clefts. In either case mesodermal tissue grows in and prevents its closure. Clefts of the iris, and a certain type of anterior synechia are both abnormalities in development.

In the case of Baby X there was presented in one eye three anterior synechia and in the other eye five anterior synechia. These synechia arose, not from the pupillary margin, but from the anterior surface of the iris in the region of the *circulus iridis minor*.

It is hard to determine which was the cause of the trouble, an undue persistence of the vascular fetal membrane or an intrauterine inflammation or both. The inflammatory causation is suggested in this case by the central corneal opacities in both eyes, but there are no posterior synechia such as one would expect if there had been an interstitial inflammation for the baby's pupils would dilate with atropine.

In the iris with the five anterior synechia, there were three distinct clefts adjacent to the synechia.

It is of interest to work back to the method of origin of these anterior synechia, for we find that they arise somewhat developmentally as do the iris clefts.

Between the second and third months—

between the eighth and twelfth week—of fetal life, the secondary optic vesicle becomes differentiated into three segments, the posterior or optic, later becoming the retinal; the intermediate or ciliary segment, and the anterior or iridic segment, which forms the lip of the optic cup and at first consist of only two layers of epithelium. This iridic segment gradually grows forward insinuating itself between the lens and the cornea. Mesoblastic tissue being later organized on its anterior surface forming the iris stroma.

The mesoblast which forms the cornea is separated as early as the sixth week into two portions, thus forming a potential anterior chamber. The anterior part finally forms the cornea and the posterior part finally forms the iris stroma and the anterior vascular sheath of the lens.

These anterior and posterior layers of mesoblasts, and the lens remain in contact for a long period but finally actually separate forming the anterior chamber which becomes lined with endothelium at the fourth month of intrauterine life, the posterior layer forming the iris stroma, being superimposed on the two layers of epithelium, the iridic segments of the secondary optic vesicle, which two layers thus form the posterior surface of the iris and contain the radial or dilator fibers of the iris.

Now it is easy to see that some defect of separation may occur between the two layers of mesoblasts, one of which forms the cornea and the other the iris stroma, a defect in separation encouraged in this case by an intrauterine corneal inflammation that resulted in central cornea opacities in both eyes, such as this baby presents. It is to such an explanation to which Mr. Parsons leans, page 785, Vol. III.

He also says that congenital cornea opacities may (Parsons, Vol. III, page 785) be associated with anterior synechia and colobomata of the iris.

SURGERY

Wm. H. Prioleau, M.D., Charleston, S. C.

INFECTIONS OF THE DISTAL PHALANX OF THE THUMB. I "BONE FELON"

An infection of common occurrence and great importance is that of the pulp of the distal phalanx of the thumb. Its proper treatment is very definite, however often not carried out due to a lack of understanding of the pathological anatomy of the condition. From this standpoint we shall discuss it. The subject matter presented here is for the most part derived from an article—"Infections of the Distal Phalanx of the Thumb"—by Harry Berman, M. D., and M. I. Strahl, M. D., published in the American Journal of Surgery, February, 1931.

The distal four fifths of the pulp of the thumb are a closed space. Strong fibrous septa radiate from the periosteum to the skin. In between the septa is fatty tissue. It is important to note that the blood vessels of the diaphysis pass thru this closed space, whereas those of the epiphysis enter the bone proximally.

This region is commonly infected by puncture wounds. Redness, heat, swelling, and extreme pain soon occur. Due to the limitation of the space, tension becomes very great. There is a rapid suppuration of the pulp tissues. The blood supply of the diaphysis is interfered with by the tension; necrosis of the bone results. The epiphysis receiving its blood supply proximally, escapes for the time being.

The treatment for this condition is incision and drainage. A lateral or horseshoe incision preferable. It provides better drainage by dividing the fibrous septa and it leaves a less objectionable scar than the anterior incision.

The depth and size should be governed by the extent of the infection. It should not necessarily reach the bone. Sequestra should be removed: otherwise the bone should not be disturbed. If drainage is instituted soon enough the epiphysis is saved. In this case there is often complete restoration of the phalanx.

If an early diagnosis is made and proper treatment instituted at once the bone will not be involved. An incision should be made as soon as there is definite evidence of a subcutaneous infection. Poultices, ichthyol ointment, etc., are to be strongly deprecated as they only cause the loss of valuable time. Very seldom will these infections subside without external drainage. Delay in providing this will result in much tissue destruction generally involving the diaphysis of the bone.

This condition is primarily a pulp infection with secondary involvement of the bone. It is not, as some text books would lead one to believe, a primary subperiosteal collection of pus. As a matter of fact, the periosteum is so intimately adherent to the bone that it is very difficult to separate it. Though the epiphysis has a separate blood supply, it may be involved by direct extension in advanced cases.

This condition is not primarily a "bone felon" as it is so commonly termed. Bone felons, strictly speaking, would be very rare provided these subcutaneous infections were drained early and adequately. When used instead of an incision in these cases, ichthyol deserves no better name than that of "conscience salve."

The foregoing applies equally to similar infections of the fingers.

MINUTES

MINUTES
of the
HOUSE OF DELEGATES
of the
SOUTH CAROLINA MEDICAL ASSOCIATION

The House of Delegates of the South Carolina Medical Association met in the ballroom of the Poinsett Hotel, Greenville, Tuesday, May 5, 1931, and was called to order at 8:10 p. m., by the President Dr. Kenneth M. Lynch, Charleston.

Dr. J. R. Des Portes, Chairman of the Credentials Committee, reported a quorum present.

The President announced that neither the President nor the President-Elect considered it necessary to address the House of Delegates at this time.

Dr. E. A. Hines, Secretary-Treasurer, read his report, which on motion duly seconded and carried was received as information.

The Report of the Council was read by the Chairman, Dr. S. E. Harmon. Dr. Harmon then addressed the House of Delegates as follows:

"Mr. Chairman and gentlemen: Your Board of Councilors met this afternoon with all members present except one; Dr. M. R. Mobley, of Florence, Councilor of the Sixth District, was absent but sent in his report. Nothing out of the ordinary came up.

"I wish to say that one member of the Council, Dr. R. C. Bruce of Greenville, Councilor for the Fourth District, went to Seneca and looked over the books with Dr. Hines, the Secretary-Treasurer (the books of both the Journal and the Association). Dr. Bruce spoke very highly of Dr. Hines's system of handling the affairs of the Association and the Journal and commended him very highly for his office system and equipment." (Applause.)

On motion, the report of the Chairman of the Council was adopted, without discussion.

The President called for the report of the Credentials Committee, and Dr. J. R. Des Portes, Chairman, read the names of the delegates present.

The President next called for the report of the Committee on Medical Economics, which was read by Dr. Olin B. Chamberlain, the Chairman, and on motion, duly seconded and carried, was adopted without discussion.

The report of the Committee on Scientific Work was next called for and was read by Dr. Hugh Smith, Chairman. On motion of Dr. W. P. Timmerman, Batesburg, duly seconded and carried, the report was adopted without discussion.

The report of the Committee on Medical Education and Hospitals was called for, and the Chairman, Dr. T. A. Pitts, and the other members of the Committee being absent, was read by Dr. Hines, Secretary-Treasurer, and on motion was adopted. Dr. W. P.

Timmerman expressed approval of the report and commended the committee for its work.

In response to a call for the report of the Committee on Public Policy and Legislation, Dr. T. H. Pope, Chairman, stated that the Committee had no report to make.

Dr. Douglas Jennings, Chairman, presented the report of the Committee on Constitution and By-Laws, which was accepted.

Dr. Robert Wilson, Chairman of the State Board of Health, read the report of the Board, which was received with applause. A motion was made to adopt the report and was duly seconded. The report was then discussed by Dr. D. L. Smith, Spartanburg, and Dr. Hugh Wyman, Columbia, Dr. Wyman commending the work of Dr. Smith, director of the hygienic laboratory, and urging the Association to support him in his work. The motion to adopt was then put to vote and carried.

The report of the Committee on Public Health and Instruction was called for. Dr. W. A. Smith, Chairman, stated that the Committee had nothing to report.

The President then called for the report of the State Board of Medical Examiners, which was read by Dr. A. Earle Boozer, Secretary, and on motion was adopted.

The President called for the report of the Delegates to the American Medical Association, and Dr. J. H. Cannon, Charleston, reported as follows:

"Each year, previously, the Delegates to the American Medical Association have gone to considerable trouble to get up a rather lengthy report reviewing and condensing the activities of the various sessions of the House of Delegates of the American Medical Association. We have wondered whether it is worth while, because the meetings of the House of Delegates are reported in detail in the Journal of the American Medical Association, so we decided this year only to call attention briefly to a few outstanding features. If the House of Delegates prefers, in future we will prepare a report such as we have made in the past.

"The meeting of the American Medical Association in Detroit was very well attended, in spite of the depression, and was characterized by considerable enthusiasm. There were many men present from all parts of the country, and the entertainment was of wide and varied nature.

"If there was any one feature that seemed to be emphasized more than any other, it was the question of medical economics. The address of the incoming president seemed to emphasize that question. One of the opinions expressed in his address, which was very comprehensive, was that the physician is no more called upon to care for the pauper class and render his services for nothing than the grocer is called upon to give that class food without remuneration. That was one of

the points he emphasized, and that was the strain and feature of his address throughout. Not only that, but the question of medical economics was emphasized so strongly that the House of Delegates authorized the formation of a Council on Medical Economics, which has been appointed and has begun to function, and we shall probably hear from it at the next meeting."

The report of the Delegates to the American Medical Association was received as information.

The President called for the report of the Committee on Publications. Dr. George E. Thompson, Chairman, said that the Committee had nothing to report.

The report of the Committee on Necrology was next called for and was read by the Chairman, Dr. P. V. Mikell, while members of the House stood.

NEW BUSINESS

Dr. G. T. Tyler reported on the clinics conducted under the auspices of the State Tuberculosis Association and the clinics at the South Carolina State Sanatorium, State Park, and announced that clinics will be held at State Park on July 29th by Dr. Paul Ringer, of Asheville, and on July 30th by Dr. P. P. McCain, Superintendent of the North Carolina State Sanatorium, and by Dr. J. Buren Sidbury, Wilmington. Dr. Tyler said that if the clinics are well attended this year and are successful it is planned to have sectional clinics in 1932, probably at Charleston, Florence, Columbia, and Greenville or Spartanburg, so that a larger number of physicians may avail themselves of the advantages afforded by these tuberculosis clinics, which are sponsored by the State Tuberculosis Association. The continued support of these clinics by the medical profession of the state was urged by Dr. Tyler.

On motion of Dr. W. P. Timmerman, duly seconded and carried, the clinics conducted under the auspices of the South Carolina Tuberculosis Association were indorsed by the House of Delegates.

Dr. F. H. McLeod, Florence, moved that a message of sympathy be sent to Dr. C. W. Kollock, one of the beloved ex-presidents of the Association, who is very seriously ill at Riverside Infirmary, Charleston. The motion was seconded and carried, and the Secretary was directed to send the message.

On motion of Dr. E. F. Parker, Charleston, the Secretary was requested to put the names of the ex-presidents of the Association at the head of the list of delegates in the printed program.

The President asked any fraternal delegates present to announce their names. Dr. Douglas Jennings, Bennettsville, stated that Dr. James M. Northington, Charlotte, Secretary-Treasurer of the Tri-State Medical Association of the Carolinas and Virginia (not a delegate) was present.

Dr. D. L. Smith offered the following motion: "Resolved, that the State Board of Health be requested by the House of Delegates of the South Carolina Medical Association to divide the sum of \$20,000, which they are now spending on diphtheria antitoxin, and to spend \$10,000 this year on toxin-anti-toxin, distributing it pro rata according to the population of the various counties, and to spend only the remaining

\$10,000 on antitoxin; and, further, that they charge a reasonable price for the antitoxin which is now being furnished free."

The motion was seconded and was then discussed by Dr. D. B. Frontis, of Red Springs, who offered an amendment to the motion to provide that the State Board of Health charge the wholesale price for antitoxin and furnish toxin-antitoxin free. This amendment was accepted by Dr. Smith. The amended motion was then discussed by Dr. A. P. McElroy, Union, and Dr. J. T. Taylor. On motion of Dr. R. S. Cathcart, the motion was tabled.

Dr. E. F. Parker, Charleston, commended the work of Dr. William Weston, Columbia, in nutrition and in calling attention to the iodine content of the vegetables produced in the state.

The Secretary read a communication from H. B. Springs, Myrtle Beach Hotel, extending an invitation to the Association to meet there in 1932. Dr. J. S. Fouche, on behalf of the Columbia Medical Society, the Mayor, City Council, and the various organizations, invited the association to meet in Columbia. After discussion a vote was taken which resulted in the selection of Columbia as the meeting place next year.

On the request of the President, the Credentials Committee made a further report, reading the names of several delegates who had presented their credentials since the list was last read. The President then announced that the ex-Presidents, members of the Council, the President of the State Board of Health, and the Chairman of the State Board of Medical Examiners are voting delegates.

Dr. C. B. Earle nominated Dr. J. R. Young, of Anderson, as President-Elect. (Applause). The nomination was seconded by Dr. G. A. Neuffer, Dr. F. H. McLeod, and Dr. J. O. Sanders. On motion of Dr. T. M. Davis, Greenville, the nominations were closed and Dr. Young was elected by acclamation. (Applause)

Dr. T. L. W. Bailey, Clinton, nominated Dr. E. A. Hines for re-election as Secretary-Treasurer. On motion of Dr. J. W. Jervey, the nominations were closed and the President cast the unanimous ballot of the House of Delegates for Dr. Hines. (Applause)

(Dr. Hines spoke as follows: "I wish to thank the members of the House of Delegates for this splendid tribute to my little service over quite a number of years".)

Dr. J. S. Rhame nominated Dr. J. H. Cannon, Charleston, to succeed himself as Councilor for the First District. On motion of Dr. Robert Wilson, the nominations were closed and the Chair cast a unanimous ballot for Dr. Cannon, who was declared elected.

Dr. G. A. Neuffer nominated Dr. T. L. W. Bailey, of Clinton, to succeed himself as Councilor for the Third District. Dr. Bailey, stating that it was impossible for him to serve, nominated Dr. W. L. Pressley, of Due West. On motion of Dr. W. P. Timmerman, a vote by ballot was taken, resulting in the election of Dr. Pressley.

Dr. William Weston nominated Dr. J. R. DesPortes, Fort Mill, to succeed himself as Councilor for the Fifth District. On motion, duly seconded and carried,

the nominations were closed and the Chair cast the unanimous ballot of the House for Dr. DesPortes, who was declared elected.

Dr. T. R. Littlejohn, of Sumter, Councilor for the Seventh District, was nominated by Dr. H. L. Shaw to succeed himself. On motion of Dr. William Weston, the nominations were closed and the Chair cast the unanimous ballot of the House for Dr. Littlejohn, who was then declared elected.

MEMBERS OF BOARD OF MEDICAL EXAMINERS

Dr. J. P. Young, Chester, nominated Dr. R. E. Abell, and Dr. Roderick McDonald nominated Dr. W. B. Heyward to succeed themselves as members of the Board of Medical Examiners. On motion, the nominations were closed and the unanimous ballot of the House of Delegates was cast for Dr. Abell and Dr. Heyward.

There being no further business to come up, the House of Delegates at ten p. m. adjourned sine dia.

SOCIETY REPORTS

FIFTH DISTRICT MEDICAL SOCIETY MEETING HELD AT YORK, S. C., APRIL 15, 1951.

PROGRAM

- (1) Case Report, Dr. Sylvia Allen, Winthrop College, Rock Hill, S. C.
- (2) Subject unannounced, Dr. A. T. Moore, Orthopedic Surgeon, Columbia, S. C.
- (5) Acidified Milk in Infant Feeding, Dr. W. E. Simpson, Rock Hill, S. C.
- (4) Anaesthetics, Dr. Chas. A. Mobley, President-Elect of the S. C. State Medical Association, Orangeburg, S. C.
- (5) Complete Hysterectomy, Dr. A. F. Burnside, Columbia, S. C.
- (6) Case Report, Dr. W. B. Ward, Fennell Infirmary, Rock Hill, S. C.

Dinner.

After dinner the business session was held and the election of officers for the next year resulted as follows:

Dr. Sam. Lindsay, Winnsboro, S. C., President.
Dr. T. N. Dulin, Clover, S. C., Vice-President.
Dr. C. S. McCants, Winnsboro, Secretary-Treas.

The President, Secretary and Dr. J. R. Des Portes were appointed to select the next meeting place.

E. E. Herlong, M. D.,
Secretary-Treasurer.

COLUMBIA MEDICAL SOCIETY

Columbia Medical Society. Columbia, S. C. Medical Society Hall. Monday, March 25, 1951, 8:50 P. M.

Second regular monthly meeting. (1) Business Session. (2) Clinical Pathological Conference.

Meeting called to order by the president, Dr. James S. Fouche, at 8:50 P. M.

Minutes of last regular business session read and adopted.

Mr. Echison of The State newspaper presented to the Columbia Medical Society a proposition which would permit the paper to run a series of 26 articles—one per week whereby the members of the medical profession would benefit materially by the subject

being brought before the public. The samples of the advertisements were left for review by the members of the medical society. These articles have been approved by the American Medical Association. Dr. Doughty moves that the society endorse this program. Seconded and discussed by Drs. Harmon, Barron, Rodgers and Fouche. Motion passed.

The chairman of the attendance committee in Dr. W. R. Barron asked that the society dismiss the committee because of the cost of reprinting the by-laws. Motion made and seconded to dismiss the committee. Motion passed.

Dr. Harmon moved that Dr. Weston, Jr., be authorized to have electric fixtures and lights be installed into the medical library. Seconded and passed.

Dr. Timmons announced that his hospital equipped with 10 beds was ready for use and asked that the society members inspect it and they could use it for their own patients.

Dr. M. K. Wyman's motion that a committee be appointed to draw up resolutions inviting the S. C. Medical Society to meet here ad lib was not passed.

The president ruled that regarding old and new members we would adhere strictly to the By-laws of the Society.

Dr. Weston, Jr., presented an interesting case of a baby for the clinical pathological conference that gave a history of not nursing well and having convulsions after the second week of life. Its physical development was good but mental far from normal. Diagnosis of infantile cerebral palsy with probably thrombosis a basis was made. Discussed by Dr. Dotterer. Dr. Plowden closed the discussion showing an atrophied brain due to sclerosis from probably an external and internal hydrocephalus.

Twenty-six members present.

Motion to adjourn at 10:10 P. M.

Respectfully submitted,
William Weston, Jr.
Secretary.

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, MARCH 24th, 1931, at 8:30 o'clock

The meeting was called to order by the President, Dr. J. Sumter Rhame.

Present—Doctors: A. E. Baker; Beach; Bowers; Cain; Cannon; Chamberlain; de Saussure; Hope; LaRoche; Lynch; McCrady; Maguire; Mood; O'Driscoll; Palmer; E. F. Parker; F. R. Price; Prioleau; Ravenel; Rhame; W. M. Rhett; Rutledge; Sams; Sanders; J. E. Smith; W. A. Smith; S. H. Speissegger; Sughrue; Waring; Whaley; I. R. Wilson, Jr.; Zerbst; Huggin.

Guests: Rear Admiral C. E. Riggs, Surgeon General of the Navy; Dr. Forbes Hawkes, of New York City; Captain J. F. Murphy and Lieutenant Commander H. M. Stenhouse of the Navy Yard; Major E. Blackshear, of Fort Moultrie; Dr. C. M. Fauntleroy; Edward Parker, Jr.

The minutes of the meeting of March 10th were read and confirmed.

The attention of the Society was directed to the fact that one of the ex-presidents of the Society and a much beloved member was sick at the Riverside Infirmary. On motion, duly seconded and carried, the Secretary was directed to write a letter to Dr. A. Johnston Buist and express to him the regrets of the members of this Society, and to wish him a speedy recovery.

The Scientific Program was called at 9:00 P. M.

Under Case Reports, Dr. W. H. Prioleau reported a series of cases and exhibited x-ray pictures of the results of phrenic neurectomy in cases of pulmonary tuberculosis. This was discussed by Doctors W. A. Smith and K. M. Lynch.

The President then introduced Rear Admiral C. E. Riggs, the Surgeon General of the U. S. Navy. Admiral Riggs gave an illuminating address on the activities of the Navy Medical Department.

At the conclusion of this paper, the meeting adjourned.

W. Atmar Smith,
Secretary.

COLUMBIA MEDICAL SOCIETY¹

Regular scientific meeting, April 13, 1931. Meeting called to order at 8:30 P. M. by the president, Dr. James S. Fouche. Minutes of last regular scientific meeting read and adopted.

Dr. Charles A. Mobley, President of the South Carolina Medical Association had the first paper which was Purpura Hemorrhagica with case report. The spleen of a 14 year old girl was removed which case was bleeding from the mucus membranes. The platelets of the blood stream were greatly increased before removal and muchly diminished below normal since removal. The case is now 17 years old and enjoying good health with a hemoglobin of 75% and platelets 70,000 which is below normal. Dr. F. M. Routh gave an interesting discussion of the case. Dr. Mobley closed the discussion.

The second paper was by Dr. George Bunch. The subject Surgical Treatment of Pulmonary Tuberculosis. This was a very interesting paper bringing out the fact that surgery had a much needed place in Tuberculosis of the lung. Dr. Bunch cited several cases upon which he had successfully operated. This discussion was opened by Dr. Emmett Madden and Dr. Tom Pitts giving X-Ray illustrations before and after artificial Pneumo-thorax was performed. Other interesting talks on the subject were made by Dr. O. B. Mayer and Dr. A. T. Moore.

Dr. O. B. Mayer moved that a committee of three be appointed to draw up resolutions whereby books could be moved from the library. This motion was seconded, discussed and passed. The library committee was appointed Dr. Richard Allison Chairman, Dr. W. E. Barron, and Dr. Tom Dotterer.

The visitors to the Columbia Medical Society was Dr. Charles Mobley, guest of Orangeburg, Dr. G. E. Bolling of Orangeburg who asked the members of the Columbia Medical Society to a fish stew and fry on Thursday April 16th at 2:30 P. M. where they were entertaining the Orangeburg Medical Society and the Columbia Medical Society. Dr. Scurry and Dr. C. H. Blake of Greenwood were present, Dr. Browning of Elloree and Dr. Davis of the Columbia Hospital.

There were 46 members present and 6 visitors.

The society adjourned at 10:05 P. M. Immediately after adjournment the Petrolargar representatives showed an interesting moving picture reel of the operation of multiple diverticuli of the bladder.

Respectfully submitted,
William Weston, Jr.,
Secretary.

CHESTER COUNTY MEDICAL SOCIETY

On March 27, 1931, the Chester County Medical Society met as the guests of Dr. George A. Hennies at his home on Walnut Street. After the members had gathered they were served an elegant supper and after supper the meeting was called to order by Dr. J. P. Young, President. The minutes of the last meeting were read and approved. The Secretary reported that Miss Ethel Ayers, County Demonstration agent, had requested him to bring up the matter of the examination of the contestants in the 4-H Girls Health Contest. On motion of Dr. Abell it was decided that the society appoint a committee to conduct this examination and that the examination be held at the Pryor Memorial Hospital. This motion was carried.

Dr. Caldwell extended the society an invitation to meet with him on April 25, 1931.

There being no further business, Dr. Robert McKay of Charlotte, N. C., the speaker for the occasion was presented by President Dr. J. P. Young. Dr. McKay gave a very interesting and instructive talk on General Problems in Urology that come to the General Practitioner.

His outline was as follows:

1. Urethral Discharge.
2. Lesions on the Penis.
3. Swellings of the Scrotum.

4. Rectal Examination.
5. Pyuria.
6. Hematuria.
7. Urinary Obstructions.

After this talk Dr. McKay graciously answered questions from the members and discussed several problems presented.

After the thanks of the society had been extended to Dr. McKay the society adjourned.

Dr. J. P. Young, Pres.

Dr. W. J. Henry, Sec.

COLUMBIA MEDICAL SOCIETY

Columbia Medical Society Hall Monday evening, April 27, meeting called to order by the president at 8:35 P. M.

Minutes of last meeting read and adopted.

Dr. W. R. Barron moved that the library committee draw up resolutions to remove books from the library so that this can be acted upon at the next business meeting. Motion seconded, discussed and passed.

Dr. Harmon, chairman of the milk committee read several passages regarding the favoring of pasteurization of milk because of the prevalence of brucellus abortans infection and throat infections obtained from milk. Dr. Rice stated that the Clemson representative had told him that the herds around Columbia were from 3 to 50% affected with brucellus abortans.

Dr. Weston, Jr., reported by request from the United States Fidelity and Guaranty Company a 25% reduction on protective policies of group doctors belonging to the medical society. Motion made to appoint a committee to investigate this offer and report to the society. Motion passed. Chair appointed Dr. Harmon chairman, Dr. Weston, Jr., and Dr. Tom Pitts.

Dr. C. E. Owens moved that the chair cast a unanimous vote for Dr. Hugh Wyman as treasurer of the Columbia Medical Society. Motion seconded and passed.

Dr. P. V. Mikell moved that committee of three be appointed to draw up suitable resolutions regarding the death of Dr. Ben Baggott. Motion seconded and passed. Chair appointed Dr. Henry Rice Chairman, Dr. Tom Dotterer and Dr. Emmett Madden.

The treasurer reported there were 16 honorary members and 75 paid members which gave the society 5 delegates. 10 more paid up members are needed to include the 6 delegates.

Dr. Harmon moved that the Columbia Medical Society extend an invitation to the South Carolina Medical Association to meet in Columbia in 1932. Seconded and passed.

Dr. I. Jenkins Mikell voted a member of the Columbia Medical Society.

Clinical pathological conference. Dr. M. E. Hutchinson presented a very interesting case in a young woman having some pelvic disturbance with recent pains in the chest. After differential diagnoses he diagnosed the case as chorio-epithelioma. Discussed by Dr. N. B. Heyward, Dr. Heyward Gibbes, Dr. Rice and Dr. Harmon. Plates of the chest shown by Dr. Mostello. Dr. Plowden showed the specimen of

the uterus and lantern slides of the chorio epitheloma. Motion to adjourn at 10:10.
37 members present.

Respectfully submitted,
William Weston, Jr.
Secretary.

COLUMBIA MEDICAL SOCIETY

Columbia, S. C.

Medical Society Hall Monday, May 11, 1931
8:30 P. M.

REGULAR SCIENTIFIC MEETING PROGRAM

1. Synovial Fluid in Chronic Arthritis—With a few remarks on The Orthopedic Care of Arthritis—Dr. A. R. Shands, Professor of Orthopedics, Duke University, Durham, N. C.

2. Renal Functional Tests and Illustrations with Lantern Slides—Dr. E. P. Alyea, Professor G-U Diseases, Duke University, Durham, N. C.
James S. Fouche, M.D. William Weston, Jr., M.D.
President Secretary.

SPARTANBURG COUNTY MEDICAL SOCIETY MEETING HELD MARCH 30, 1931.

The meeting was called to order by the president, Dr. H. E. Heinitch, Jr. The minutes of the February meeting were read and approved.

Dr. E. A. Hines, Jr., presented a very interesting heart case. This case was discussed by Drs. R. P. Finney, J. F. Busch and H. E. Heinitch, Jr.

Dr. E. B. Gray read a very interesting paper entitled "The Maxillary Sinus as a Focus of Infection." Dr. Gray stated that these patients with chronic antrum infection showed an increased susceptibility to dust and often had headaches, post nasal discharge, slight temperatures, neuralgia, arthritis or asthma. Chronic antral infection increases the patient's susceptibility to hay fever and asthma. Dr. Gray reported several cases in which the above named conditions disappeared after treatment of a chronic infection of the antrum.

This paper was discussed by Dr. J. T. Carter, Dr. Carter stated that some cases of acute mastoiditis have sinus infection on the same side and that the mastoid infection does not usually clear up unless the antrum is also treated.

In closing Dr. Gray stated that the entire respiratory tract was usually infected in these cases.

Dr. Roy P. Finney read a paper entitled "The Doctor and Some of His Problems." This was a very eloquent philosophical dissertation. The discussion was opened by Drs. Lindsay and Josey.

The secretary read a letter from Mrs. L. O. Mauldin, Acting President of the Woman's Auxilliary of the South Carolina Medical Association. Mrs. Mauldin urged the president, Dr. H. E. Heinitch, Jr., to aid in the organization of a Woman's Auxilliary of the Spartanburg County Medical Society.

There being no further business the meeting adjourned.

H. E. Heinitch, Jr., Pres.
W. M. Sheridan, Sec.

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, APRIL 28th, 1931, at 8:30 o'clock.

The meeting was called to order by the President, Dr. J. Sumter Rhame.

Present—Doctors: A. E. Baker; A. E. Baker, Jr.; B. R. Baker; Beach; Beckman; Boette; Bowers; Buist; Byrnes; Cain; Cannon; Chamberlain; de Saussure; Elston; Finger; W. H. Frampton; Hope; Jackson; Jenkins; F. B. Johnson; LaRoche; Lynch; McCrady; McInnes; Maguire; Mitchell; O'Driscoll; Pearlstone; F. R. Price; Prioleau; Ravenel; Rhame; W. M. Rhett; Rutledge; Sams; Scharlock; Scott; W. A. Smith; S. H. Speisegger; Sughrue; Taft; Waring; I. R. Wilson; I. R. Wilson, Jr.; Robert Wilson; Huggin; Woods. (47)

Guests: Dr. Roe E. Remington, Dr. P. M. Temples and Dr. Walter E. Gower, of the Medical College; Dr. Carroll Brown of Walterboro; Dr. Peeples of Bowman; Dr. Hillyer Rudisill of the Roper Hospital; and Dr. Tom H. Hutson, of Miami, Florida. Dr. V. P. W. Sydenstricker of The University of Georgia, Augusta, as guest essayist.

The minutes of the Meeting of April 14th were read and confirmed.

Dr. A. E. Baker presented the following resolutions of respect in memory of Dr. John Mercier Green:

Dr. John Mercier Green, the son of Rev. John Mercier Green, D.D., and Margaret Elizabeth Green, was born in Charleston, S. C., on the 22nd of October, 1869. His early education was obtained in the public schools of Charleston and the College of Charleston. He then entered the Medical College of the State of South Carolina and graduated in 1891. Later he obtained the degree of Ph.D., 1897. He served an internship of one year at St. Xavier Infirmary.

April 14th, 1909, he married Miss Katherine Jenkins Leiding of Charleston, S. C.

The beginning of his medical career, he served as City Dispensary physician for four years. He then specialized in genito-urinary diseases. In 1901 he was elected to the position of Chief Officer of the City Board of Health, and in this capacity he served the community with zeal, energy and marked ability until 1925, when he was elected to fill the most important position of City Epidemiologist for life.

He was a member of the S. C. State Medical Association, the American Medical Association and the Medical Society of South Carolina.

He was also a member of the Charleston Chamber of Commerce.

The following are some of the outstanding accomplishments of his administration as Health Officer:

Dr. Green gained control of the repeated epidemics of typhoid fever in Charleston following the visiting of troops during the Spanish American War, by doing away with the water cisterns, by insisting on better sewerage, by the abolishment of the old time yard privy, by removal of the breeding places for flies by driving the cows out of the city, and by insisting upon pasteurization of milk before it was sold in the city.

He kept Smallpox down by insisting upon vaccination

for school children, and as far as possible upon universal vaccination of the colored race. Dr. Green gained a southwide reputation as Diagnostician of Smallpox.

In 1918 Dr. Green led the city in precautionary measures against influenza.

He also demonstrated and convinced the medical profession that fumigation with germicidal agents of a bedroom, after being occupied by a patient with a contagious disease, was of no benefit, whereupon hospitals and private homes ceased to fumigate and instituted other scientific precautions.

He worked for and helped to establish a water system that is one of the finest in the country.

During his later days his activities were impaired by ill health. The end came suddenly January 14th, 1931.

His genial personality and willingness to give aid to those in need of his services endeared him to friends, who were numbered by many score, and in his passing the medical profession and community suffered a real loss.

Therefore be it RESOLVED:

That by the death of Dr. J. Mercier Green the Medical Profession of Charleston and the Community at large have sustained a great loss.

That a copy of this preamble and these resolutions be inscribed in the minutes of this Society, and that a copy be sent to the family of the deceased.

A. E. Baker, M.D.

John J. LaRoche, M.D.

J. H. Cannon, M.D.

These resolutions were adopted by a standing vote.

Under Unfinished Business, the matter of the resignation of Doctors H. P. Wagener and W. L. A. Wellbrock was brought up for consideration. Dr. Edward Rutledge moved that the constitution be changed so that men residing out of the state be compelled to pay only half of the annual dues, provided that they be members of the medical societies of the counties in which they live. This was discussed by Doctors Cannon, Maguire, Buist and Cain. The President ruled that this motion must be submitted in writing and a copy sent to every member before the next meeting, before consideration could be given to this motion. Dr. Buist moved that the resignations of Doctors Wagener and Wellbrock be accepted with regret. This was seconded and carried.

The Scientific Program was called at 9:00 P. M.

Dr. H. W. de Saussure reported and exhibited a case of anencephalus. This was discussed by Dr. McCrady.

Dr. J. J. LaRoche reported a case simulating agranulocytic angina.

Dr. P. M. Temples reported a case of infectious mononucleosis. These papers were discussed by Dr. F. B. Johnson and Dr. Sydenstricker.

Dr. P. M. Huggin read a brief report illustrating the value of the blood count in determining activity and in the prognosis of pulmonary tuberculosis. This was discussed by Dr. W. A. Smith.

The President requested Dr. K. M. Lynch to introduce the guest essayist. Dr. Lynch in a few well-chosen

words introduced Dr. V. P. W. Sydenstricker, Professor of Medicine at the University of Georgia. Dr. Sydenstricker expressed pleasure at being invited to address the Society, and delivered a very able discussion of Monocytic Leukaemia, illustrating his lecture with lantern slides.

There being no further business, the meeting adjourned.

W. Atmar Smith
Secretary.

**PROCEEDINGS OF THE REGULAR MEETING
OF THE MEDICAL SOCIETY OF SOUTH CAROLINA
HELD AT ROPER HOSPITAL, TUESDAY
EVENING, APRIL 14th, 1951, at 8:50 o'clock.**

The meeting was called to order by the President, Dr. J. Sumter Rhame.

Present—Doctors: A. E. Baker; A. E. Baker, Jr.; B. R. Baker; Ball; Banov; Beach; Bowers; Burn; Cain; Cathcart; Chamberlain; Cannon; de Saussure; F. B. Johnson; Lynch; McCrady; Maguire; Martin; Mitchell; Paemer; E. F. Parker; Pearlstine; F. R. Price; Prioleau; Rhame; W. P. Rhett; Richards; Rutledge; Sams; Scott; J. E. Smith; W. A. Smith; W. H. Speissegger; Sughrue; Taft; Townsend; Whaley; R. Wilson; Huggin; Woods. (40)

Guests: Dr. H. A. Royster, of Raleigh, North Carolina; Dr. W. A. Black, of Beaufort; Dr. Hillyer Rudisill of Charleston; Dr. George Rhame of Camden, S. C.; and Dr. Albrecht, of Germany.

The minutes of the meeting of March 24th were read and confirmed.

The application of Dr. Hillyer Rudisill, properly endorsed and enclosing initiation fee, was presented by the Secretary. This was referred to the Board of Censors.

The Secretary read the following letter from Doctors Henry P. Wagener and W. L. A. Wellbrock:

Mayo Clinic, Rochester, Minn.
April 2nd

Dr. W. Atmar Smith
Sect'y Medical Society
72 Society Street
Charleston, S. C.
Dear Dr. Smith:

Since our permanent residence and practise in Minnesota makes it necessary for us to be members of the Olmsted County Medical Society and the Minnesota State Medical Association, we wish to tender herewith our resignation from the Medical Society of South Carolina.

We regret that we are forced to sever our connections with the South Carolina Society.

Respectfully,
Henry P. Wagener
W. L. A. Wellbrock

On motion it was decided to postpone action on this letter until the next meeting, as Dr. R. S. Cathcart stated that he would submit an amendment to the By-Laws to change them in such a way as to admit out-of-state members to membership at a reduction in annual dues.

The President stated that it was his sad duty to announce the death of a member of this Society, Dr. William Simons, of Summerville. On motion, he appointed the following committee to draw up resolutions of respect to the memory of Dr. Simons: Dr. T. E. Bowers, Dr. J. I. Waring, and Dr. O. B. Chamberlain.

The Scientific Session was called at 9:00 P. M.

Dr. D. L. Maguire reported a case of ruptured rectus muscle and deep epigastric artery, with hematoma, simulating appendicitis. This was discussed by Dr. R. S. Cathcart.

Dr. T. E. Bowers reported a case of abdominal suppuration, with localized peritonitis, the cause of which could not be determined, even at operation. The patient, however, recovered, with drainage.

Dr. T. E. Martin reported a case of coronary thrombosis presenting a pericardial friction as an early sign. Dr. J. H. Cannon showed an electrocardiographic tracing of this case, and discussed the report.

At the conclusion of these reports, the President called upon Dr. R. S. Cathcart to introduce the guest speaker of the evening. Dr. Cathcart stated that it was his pleasure to introduce to the Society Dr. H. A. Royster, of Raleigh, North Carolina, who was a student, teacher, author, and distinguished surgeon of the South, who numbered among his friends the best surgeons of this country. Dr. Royster expressed pleasure at being invited to address the Society and delivered an excellent address on "The pathological Lesions of Appendicitis," illustrating his lecture with lantern slides.

There being no further business, the meeting adjourned.

W. Atmar Smith
Secretary

**YORK COUNTY MEDICAL SOCIETY
RESOLUTIONS**

IN MEMORIAM—DR. JOSEPH RODDEY MILLER, who passed away March 6th 1951, at his home, Rock Hill, S. C., in the 64th year of his age, he being the son of the late William Joseph Miller and the late Josephine Roddy.

On December 16th, 1896 he was married to Miss Mary L. Lindsay of Chester, S. C. From this union two sons and two daughters were born—William Lindsay Miller of Gadsden, Ala., Dr. J. Roddey Miller of Greensboro, N. C., Miss Margaret Miller of Lexington school faculty, Lexington, S. C., and Miss Elizabeth Miller of Rock Hill, S. C.

He was a graduate of Erskine College 1887 and an honor graduate of the Charleston Medical College 1891. He was an elder of the A. R. P. Church, Rock Hill, S. C. for many years and chairman of the city board of health of Rock Hill S. C. for several years.

Whereas, it has pleased Almighty God in his infinite wisdom to remove from our midst Dr. Joseph Roddey Miller taking him from the scene of his earthly labors to that Heavenly Home where there is no sickness, sorrow nor death—

Resolved that York County Medical Society has

lost one of its most valued and faithful members and our profession has been deprived of his presence and advice at our meetings. We deplore his loss and bear testimony of his faithfulness, unfailing courtesy, gentleness and skillful knowledge as a physician.

We express our deepest sympathy to his bereaved family and loved ones.

May his modesty of disposition and deep professional knowledge, nobility of character and faithfulness to the duties of his profession, state and church ever be a shining example to his colleagues of the medical profession.

J. E. Massey
W. C. Whitesides
W. K. McGill
Committee on Necrology, York
County Medical Society.

MARION COUNTY MEDICAL SOCIETY ELECTS OFFICERS

At a meeting of Marion County Medical Society, Marion City Hall, December 17, 1930, election of officers for 1931 resulted as follows:

President: Dr. J. C. Moore, Jr., Marion, S. C.

Vice-President: Dr. L. S. Miles, Mullins, S. C.

Secretary-Treasurer: Dr. B. M. Montgomery, Marion, S. C.

Delegate S. C. Medical Association, Greenville, S. C., May 5, 6, and 7, 1931: Dr. Z. G. Smith.

Alternate S. C. Medical Association, Greenville, S. C., May 5, 6, and 7, 1931: Dr. L. M. McMillan.

The Chair appointed the following Board of Censors and committees:

Board of Censors: Drs. J. G. Stanley; L. S. Miles; and D. W. Green.

Program Committee: Drs. L. S. Miles; J. C. Moore, Jr.; and B. M. Montgomery.

Public Health Committee: Drs. L. M. McMillan; Z. G. Smith; and R. B. Stith.

Those attending the session were: Drs. L. M. McMillan; D. W. Green; J. C. Moore, Jr.; N. N. Schofield; L. S. Miles; H. B. Webb; Z. G. Smith; J. G. Stanley; and B. M. Montgomery.

Dinner was served at Hotel Marion.

B. M. Montgomery
Secretary.

KERSHAW COUNTY MEDICAL SOCIETY

At the regular monthly meeting, January 15, 1931, of the Kershaw County Medical Association, at a dinner at the home of Dr. S. C. Zemp in Camden, the officers elect for 1931 took charge: President, Dr. Grigsby of Blaney; Vice-President, Dr. Rhame of Camden; Secretary-Treasurer, Dr. S. C. Zemp of Camden; and Corresponding Secretary, Dr. Corbett of Camden. A paper entitled, "Why an appendix," was read and generally discussed. The only members absent were Dr. Truesdale of Bethune and Drs. Blackmon and Turner of Kershaw.

Jno. W. Corbett,
Cor.-Secretary.

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Box 388
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Superintendent

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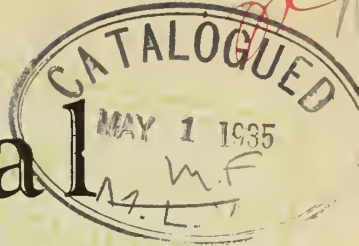
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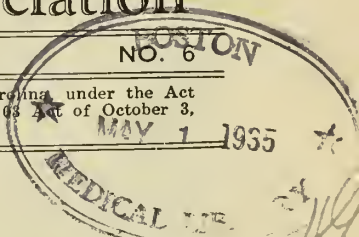
South Carolina Medical Association

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The Journal

OF THE

South Carolina Medical Association

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EDITORIAL

AMERICAN WOMEN'S HOSPITALS PIONEER WORK IN SPARTANBURG

Through the kindness of Dr. L. Rosa Gantt, President Elect of the American Women's Hospitals organization, we are permitted to call especial attention to the first work to be done in Spartanburg County selecting as their major problem the study of pellagra. The County Health Unit of which Dr. J. M. Beeler is the Director will cooperate in the investigation. Dr. Hilla Sheriff will be in direct charge of the activities in connection with the investigation. The equipment in addition to the personnel alluded to consists of a health bus, modern from every standpoint. The program will be along the lines of preventive medicine. This will be broad in scope including health education, the control of all communicable disease. General sanitation will be stressed throughout the rural districts of Spartanburg County. The nutrition program alone should prove of inestimable benefit to the whole population

both city and county by virtue of its wide publicity.

Dr. Sheriff exhibited the health motor bus at the recent meeting of the State Medical Association in Greenville.

Spartanburg has already a world wide fame by virtue of the scientific investigations of pellagra made there some years ago by the Thompson McFadden Commission.

In some respects this new venture promises, as we see it, an intrinsic value not only to the Piedmont sections but to the whole country not hitherto observed.

The Medical Women's National Association with headquarters in New York has done an immense amount of work in foreign countries during and after the world war. The organization began about that time and of course the challenge from then until the present time was greatest in the European Countries. We feel confident that the long service in the organization of Dr. Gantt and the final crowning honor of being elevated to the Presidency had much to do with the

selection of South Carolina as the first point of contact in the United States by this great organization. We urge the members of the South Carolina Medical Association to visit Spartanburg and see for themselves the actual progress going on there with more developments to follow.

so and were enthusiastic about it, not just nice about it.

I hope we can carry the idea out more fully in Columbia.

Yours sincerely,

Thos. Brockman, M. D.

CLINICS AT THE STATE ASSOCIATION A SUCCESS

In the last issue of the Journal in commenting on the advisability of continuing the clinics as a part of the annual program we stated that it was highly desirable to follow some plans not hitherto tried out if they were to be considered from the standpoint of attendance worth the trouble of putting them on. We are glad to note herewith a very favorable report from one of the clinics held at the recent meeting.

Greer, S. C., June 1st, 1931.

Dr. Kenneth Lynch, Retiring Pres.

Dr. Chas. Mobley, Pres.

Dr. J. R. Young, Pres. Elect.

Dr. E. A. Hines, Sec.-Treas.

Dr. Hugh Smith, Chair. Scientific Com.

Gentlemen:

This is a delayed report of the Clinic held on May 7th. last afternoon of the State meeting, and I am making this report in order that you men may have some idea as to how we got along, and I hope it will assist you in making your plans for next year.

We had twenty-two Doctors to register for the Proctologic Clinic and several came who for some reason failed to enroll.

We had twenty patients, all of a very interesting type of rectal diseases and the men apparently were pleased with my efforts at teaching. I felt very grateful for the response of these Doctors to my invitation, and in view of the heavy rain and storm I felt good over the attendance. I can heartily recommend this plan to you as one of the ways to stimulate attendance and interest in our State meetings.

I am thoroughly convinced some of these Doctors who came here will go to Columbia hoping to see more Clinic cases. They said

ASSISTANT SECRETARY EDITOR AWARDED FELLOWSHIP BY THE MAYO FOUNDATION

Dr. Edgar A. Hines, Jr., has been granted a Fellowship in Medicine by the Mayo Foundation, Rochester, Minn. Dr. Hines graduated from the Medical College of the State of South Carolina in the class of 1928. During his senior year he was student intern at the Porter Military Academy Infirmary. During his junior and senior summer vacation periods he was student intern at the Infants' and Children's Hospital, Saluda, N. C. The year following his graduation he was an intern at St. Elizabeth's Hospital, Richmond, Virginia. After the completion of this service Dr. Hines was engaged in general practice at Seneca, S. C. and on July 1, 1930, became Resident Physician at the Spartanburg General Hospital. During the year of this residency Dr. Hines has attended the Graduate School of Wofford College and will receive the degree of Master of Arts from that Institution. Dr. Hines has contributed a number of creditable articles to medical literature one of the most notable of them being a paper on Tetanus Neonatorum published in the American Journal of Diseases of Children, March, 1930. Among other articles published in various journals have been Congenital Malformation of the Esophagus, Confusion of Pellagra with Sprue and Agranulocytic-angina. Dr. Hines was elected Assistant Secretary Editor by the Council at the Florence meeting in 1930. He was the Editor in Chief of the new bulletin of the Association which received much favorable notice both at the Florence meeting and the meeting just held in Greenville. While at the Mayo Clinic he will continue his contributions to the Journal and attend the annual meetings.

ORIGINAL ARTICLES

*STRESSING SOME EVERYDAY PROCEDURES IN OBSTETRICS

By R. L. McCrady, M. D., Assistant Professor in Obstetrics of the Medical College of the State of South Carolina, Charleston, S. C.

Not infrequently one is called to a patient in labor and according to the history the patient has had a long labor and is tired out and something should be done.

Now is it a fact that the patient has had a long labor, or more to the point is the patient exhausted?

In other words when should we feel it necessary to interfere?

One can get some idea about this by noting the pulse, temperature and most important of all the action of the uterus. When the uterus is functioning satisfactorily during labor it relaxes thoroughly between pains. A uterus that is tired out and which has accomplished all that it is going to accomplish is irritable and tender between pains and does not thoroughly relax. Such a uterus is holding the baby at a standstill, so to speak, rather than promoting its expulsion. With a uterus acting in such a manner, and the pulse and temperature up around 100, the time has come to interfere either by putting the uterus at rest with the use of sedatives and narcotics or by expediting the delivery. This depending on the condition of the cervix. Sometimes a hypodermic of morphine and Zi of sodium bromide in 4 oz. of water by rectum will insure a rest and sleep and after awhile the labor pains will return with renewed vigor and the case will go on to a spontaneous delivery or the cervix will dilate and soften to a state where it will be possible to render assistance with a reasonable hope of a satisfactory outcome.

One should keep in mind too the remarkable value of 10% Glucose intravenously in these

cases where the patient is unable to retain nourishment.

A word more about prolonged labor with reference particularly to the second stage. After the cervix is completely dilated one should not allow more than an hour or an hour and a half to elapse. If the pains are weak the patient has accomplished all that she is going to. If the pains are strong one should investigate as to the possibility of a posterior position. At any rate the time has come to interfere. There is nothing to be gained by waiting longer.

So far we have considered the mother. Now what might be said in regard to the baby. Remember that as long as the membranes are intact in the great majority of cases the baby is safe no matter what the duration of labor.

Right here I must express an opinion for which I will probably be taken to task. I refer to the oft-repeated advice to frequently listen to the fetal heart during labor. The idea being I take it to do something radical in the interest of the baby should the fetal heart be too rapid or too slow or not just right according to the interpretation of the attendant. Now if one is interested in the welfare of the baby I do not know of any way in which he can disappoint himself quicker than to try to save the baby by attempting the delivery before conditions are right for such a procedure.

Imagine one attempting delivery with the cervix half open because the fetal heart is going to the bad.

The baby will surely be lost and think of the mother!

This advice about the fetal heart I believe will lead one into deep water. Of course if conditions are such that forceps can be applied and forceps are applied then it really is important to listen to the fetal heart for the forceps may have pinched the cord or the fetal circulation may be impaired for one reason or another and having things under

*Read before the Columbia Medical Society, March, 9, 1931, Columbia, S. C.

one's control one can hasten the delivery or change the forceps as the case may be. Attention to the fetal heart is important too in the handling of a breech, particularly after the buttocks have appeared at the vulva for here it would be possible to hurry the delivery altho this would seldom be advisable.

One other word in regard to the welfare of the baby. Remember that morphine affects the baby if given near the end of labor. Be sparing of narcotics in the second stage. If you give morphine let the dose be small. There may be difficulty in resuscitating the baby.

Another danger too to the baby is the routine use of low forceps in an endeavor to save the woman a half hour or an hour of pain.

If the head has been on the perineum a long time I say forceps, otherwise hands off for there is danger of intracranial hemorrhage to the baby and danger of introducing infection to the mother. Furthermore, although there are some that say not, I am convinced that there is more likelihood of a laceration particularly where one is dealing with a primipara.

Now suppose you are compelled to apply forceps, what about tears of the perineum and the time to repair them? Lacerations of the perineum will occur every now and then in the best regulated deliveries whether forceps have been used or not. We were taught to repair all lacerations at the time of delivery. Is this the very best advice? Frequently a moderate first degree tear will heal perfectly without sutures. When the thighs come down on the bed and the legs come together the raw surfaces of a tear come into apposition and healing takes place without the danger of infection that goes with suturing particularly when conditions are not the best. In other words I feel that unless conditions are ideal a first degree tear had best be left alone. Of course a second degree laceration where the levator ani muscles are involved should be repaired immediately provided conditions are at all suitable. Now what about a third degree laceration? I believe such a repair should be postponed until later whether the case be delivered in the hospital or otherwise.

In the first place a patient having such a laceration has probably just come through a hard delivery and has had enough for one sitting, both of operative procedure and of anesthetic. In the second place she has not been prepared for the repair of a laceration involving the sphincter ani. She has probably had one enema, if that, and has been on her usual full diet until the onset of labor. To have any hope of success in the repair of such a laceration the patient should be on a liquid diet for two days before operation and then a dose of castor oil followed by 2 or 3 enemas, to insure the intestinal tract being empty.

After the repair liquid diet should be continued for a number of days and opium given to quiet the intestines. About the ninth day 6 oz. of mineral oil are given followed in a few hours by $\frac{1}{2}$ bottle of citrate of magnesia.

Probably the best time to undertake such a repair is on the eighth or ninth day postpartem, when the patient has recovered from the first ordeal and is ready for the second.

There will be much less danger of puerperal infection and much more chance of success with the repair.

Another subject might be stressed before closing. I refer to the handling of a breech delivery. What might be emphasized here?

First allow labor pains to force the breech out as far as the umbilicus or angles of the scapulæ and then start the anesthetic. Remember not to hurry the delivery of the arms.

We were taught that 7 or 8 minutes was the limit of time to elapse from the birth of the navel until the head and arms were delivered.

I have taken fifteen minutes and been rewarded with a baby in good condition. Dr. Potter of Buffalo who is well known for his skill and success in breech extractions has stated that 20 minutes is not excessive. More babies are undoubtedly lost or damaged in a frantic effort to free the arms and deliver the head than by taking longer and going about the delivery of the arms and head in a methodical and correct manner.

Some men routinely attach a tape to and bring down an arm after the breech has appeared. I have done this a few times but believe it to be poor practice. It is introducing an unnecessary element of trauma and the

possibility of infection. The obstetrician should be able to get the arms down and through any cervix or pelvis that the head can come through. After the delivery of the arms the biparietal diameter of the head should be maneuvered into one of the oblique diameters of the pelvis.

In the handling of these cases there is something else of no little importance that should be stressed. I refer to having help at hand when conducting a breech delivery in a primipara. I mean an assistant who can help in case the hands of the attendant become tired or the head of the baby should hang up in the pelvis and require pressure over the inlet to promote its progress through the pelvis.

Dr. Robert L. DeNormandie, well known obstetrician, states in his "Case histories of Obstetrics" that he has never been in the predicament of having to deliver a breech alone. Help from a near by physician can always, except in remote country districts, be arranged if the physician wishes it.

*PRÆCOX PUBERTAS IN THE CHILD ASSOCIATED WITH MALIGNANT OVARIAN TUMORS

REPORT OF CASE

By Hugh S. Black, M.D., Spartanburg, S. C.

Masson recently in the review of 564 cases of Malignant Tumors of the ovary treated surgically, found five of the patients to be under twenty years of age. All of these cases were carcinomatous. Hunt has since reported a carcinoma of the ovary in an infant of seventeen months with operation and recovery.

Porter concluded from a study of 2,975 cases of ovarian tumors collected from the literature, that 20% of all ovarian tumors are malignant and that 5% are sarcomata, though MacCarty and Broders believe that many so-called ovarian sarcomata are really carcinoma and that sarcoma rarely occurs in the ovary.

Bland Sutton says, "The ovary is prone to become the seat of sarcoma in early life

followed by a period of renewed but diminished liability." He adds that sarcoma of the ovary is rather common under five years of age and occurs with decreasing frequency until about the time of the onset of puberty. In adults there are two common periods between the twentieth and thirtieth years and after the menopause. Bland Sutton collected one hundred cases in which ovariectomy was performed in children under fifteen years. In twenty-one, the condition was sarcoma.

Sarcoma in adults is usually of the spindle cell type or fibro-sarcoma while those in children are usually of the small round cell type or lympho-sarcoma which is the most malignant of all types of sarcoma. Recently a child aged 7 was operated on at The Mary Black Hospital for a Malignant Ovarian Cyst, which, according to Wilson (R. F.) who studied it pathologically was a round-cell sarcoma.

Report of case No. A-10,736. A.F. Female, age 7, white. Family history: Mother and Father living and in good health. Previous diseases: Whooping Cough, Mumps, Chicken Pox, Colitis, the latter at the age of fifteen months. Her present complaint was general increase in size of abdomen with pain. In April 1929 the patient's mother noticed that there was some increase in the size of her daughter's abdomen. She did not think any more concerning this until August 15, 1929, when it appeared that the abdomen was continuing to enlarge. Up until this time there was no complaint from the patient. About two weeks ago which was Sept. 1, 1929, she complained of pain and soreness in the right lower abdomen, which lasted three or four days. The pain was severe and colicky and according to her family physician, the recti abdominal muscles showed some evidence of rigidity. On examination the family physician detected an enlargement in the right lower abdomen but was not certain as to what it was, though he was inclined to think it was an appendiceal abscess. She was nauseated and vomited at the time of this pain and had a slight fever, but no chill. At this time her bowels were loose, having six or eight movements a day for three or four days, free from pain and blood. No

*Read before the South Carolina Medical Association, Greenville, S. C., May 6, 1931.

cardiac, renal nor pulmonary symptoms. The child is smart in school, intelligent and has always been playful with the other children until the present illness.

On admission to the Mary Black Hospital 9-29-29, her weight was 80 lbs., a gain of 11½ lbs. since April 1929, at which time she weighed 68½ lbs. Her pulse was 98, temperature 98. Tonsils enlarged. Teeth, few caries. Heart, normal in size and clear tone. Lungs, clear and resonant, Abdomen, general enlargement with an apparently movable tumor mass palpated in the lower abdomen, more on the right side. There was evidence of marked abdominal ascites. The axillary and genital regions showed marked growth of hair, deposits of fat and the vulva and clitoris were enlarged as those of a girl from 18 to 20 years of age. The hymen was intact and the pelvic examination was made with less discomfort than the average virgin of 25 years and revealed a large pelvic mass which was slightly movable, more to the left. The uterus could not be definitely palpated. The breasts were developed as those of a girl 20 to 25 years of age. The facies and mental attitude was that of a child. Urine: 1020, Acid, Neg. for Alb. and Sugar. Microscopic negative. Blood count; Hemoglobin 82%, R. B. C. 3,600,000, leukocytes 19,300 with 82% polys and 18% lymphocytes. Wassermann, Kolmer and Kahn tests were negative.

Operative Diagnosis, Sarcoma of Left Ovary with involvement of the Omentum, and part of the parietal peritoneum. Abdominal ascites.

Operation: Left Salpingo-Oophorectomy. Partial Omentectomy. Partial Resection of the Parietal Peritoneum. Anæsthesia: Ether.

Low midline abdominal incision. Two gallons of blood stained fluid aspirated from the abdominal cavity and a large sarcomatous growth on the left ovary the size of an adult head was removed. There were several cystic compartments. The growth had partly twisted on itself and was lying mostly on the right side, adherent to the parietal peritoneum and omentum which necessitated removal of about one-half of the omentum and resection of part of the parietal peritoneum. The uterus was very small and the right tube and

ovary were normal. The liver, stomach and gall bladder were negative. Culture of fluid taken from the abdomen was negative. The patient reacted well and made a favorable convalescence, leaving the hospital on the 14th. day but returned two weeks later for a series of Radium and X-ray treatments.

The symptoms of Malignant Tumor of the ovary in children are general and consist of the presence of an abdominal tumor which usually increases in size rapidly and is often discovered by the parents accidentally. Usually, regardless of the size of the growth, there are absent the symptoms which one would expect to be present from pressure on the bladder and bowel. This might be due to the fact that the uterus and adnexa in the young are more abdominal than pelvic. If ascites is present and the growth rapid and large, there is an increase in the weight of the patient early in the disease but in the later stage this decreases. Pain is as a rule absent, but when present it usually points toward either an intestinal obstruction or results from a twisting, or may be due to the enlargement of the tumor. In the late stage there is an anemia of the secondary type, intestinal disturbances as diarrhea or constipation, evidence of metastasis, cachexia and finally the inevitable.

Of the interesting and special symptoms associated with ovarian tumors in children are those of *pubertas præcox*, the true homosexual precocity, the breasts and external genitalia develop similar to those that are normal at puberty. There is the characteristic deposit of fat, the presence of pubic, labial and axillary hair. The clitoris enlarges and as in the above reported case, the vagina was that of a 20 or 25 year old girl. Menstruation usually appears at puberty, but as a rule mental precocity is not present in these cases. The mental age corresponds to the age of the child and the child usually plays with things that are appealing to all children. There is often a change in voice, following removal of tumor, and the trend is the rather rapid subsiding of the symptoms of precocity after operation.

Reuben states that precocious sexual development may occur in association with tumors of the pineal and supra-renal gland,

but they are found in almost every instance in the male and that differentiation from ovarian tumors should be easy. In some cases of hyper-functionary ovaries, Pubertas Præcox may be noted and in these cases repeated examination should be made to rule out ovarian tumors. The presence of sexual precocity in connection with ovarian tumors does not permit one to make a differential diagnosis of the type of growth before operation for cases have been reported occurring with simple cysts, dermoid cysts, teratomas, carcinomas, and sarcomas of the ovary.

The mechanism of the stimulus to the development of sexual precocity is not known, but there are two hypotheses in regard to ovarian tumors: That the neoplastic growth acts as a non-specific stimulus to the hyperactivity of the normal ovarian tissue and that the neoplastic tissue itself functions.

All types of ovarian tumors should be treated surgically, provided they are seen by the surgeon when they are in the operable stage. The disputed question of today is whether in malignant cases the unaffected ovary should be removed, particularly in the young and as far as one can ascertain the tendency is to be conservative with the normal ovary, especially in the child. In benign growths, the normal ovary should be saved, but if there are cysts in it enucleate them if possible and if not, resection should be done but by all means leave some ovarian tissue. In the malignant cases in children, some remove only the diseased ovary and tube, while others remove both ovaries and tubes and follow operation with X-ray and Radium treatment.

Tapping in some cases where there is marked abdominal distention with marked spreading of the ribs and great dyspnea is beneficial if done two or three days before operation as it permits re-adjustment of the respiratory and circulatory systems. Tapping, however, is not harmless for there are the possibilities of disseminating malignant cells, producing a violent peritonitis and rupturing large vessels in the sac wall.

Following the operation and a series of X-ray and Radium treatments the child seemed to get along fine for ten months.

Then she began to have a recurrence of the swelling in the abdomen and to have a bloody tinged vaginal discharge, which, in spite of X-ray and radium treatment continued to get worse until death came thirteen months after operation. However, before the recurrence was noticed, the child was apparently all right and returned to school but the symptom of precocity did not seem to improve and disappear as many writers report.

References:

- Carcinoma of Ovary in Infancy. Verne C. Hunt—*Annals of Surgery*, 1928.
Sarcoma, associated with Ovarian Fibroma, Caylor—*Annals of Surgery*, 1925.

*NEGLECTED DETERMINING FACTORS IN INFANT FEEDING

By William Weston, M. D., Columbia, S. C.

It has only been a comparatively short time that we have known how variable is the chemical formula of milk and we do not yet fully appreciate the significance of this knowledge.

Feeding experiments have demonstrated that the diet of the lactating animal plays a determining role in the chemical nature of her milk. Therefore, if the animal is in normal health and we have definite chemical knowledge of the food she eats and the water she drinks, we can with reasonable accuracy predict the formula of her milk.

In conducting feeding experiments which have for their object the influencing of milk through the diet of the lactating animal, it is important that we remember that milk is both a secretion and an excretion. Otherwise we may draw erroneous conclusions, because should we administer the individual elements in their inorganic form, very different results will be obtained than when given in their natural or organic form such as they exist in certain foods.

We have sufficient information upon which to conclude that no element is utilized in the system independently of other element.

At present our knowledge is incomplete.

*Read before the South Carolina Medical Association, Greenville, S. C., May 6, 1931.

as to the number or nature of the metabolizing agents required for the utilization by the body of a given element. Until additional information is available we may assume that these agents are present in certain foods, though perhaps not always in sufficient proportions to metabolize an element in order to fully meet nutritional requirements. For many years our study of milk has been largely confined to the nature and relative proportions of the fats, carbohydrates and proteins and this study has consisted of so manipulating them as to make them more digestible. The ash, when considered at all, was thought of as a substance, rather than as a relatively large group of elements with definite functions to perform in the process of nutrition. At least nine of these elements are known to be necessary to sustain life and when any one of them is supplied in amounts below the definite nutritional requirement over a considerable period of time, there begins a steady decline in health.

There were, however, some who were unwilling to accept the view that the ash was of little importance in evaluating milk. Members of this group have undertaken a critical study for the purpose of ascertaining the functions these elements perform in the processes of nutrition. Our information at present is far from satisfying, but research is going forward at a surprisingly rapid rate and during its progress we are becoming convinced that before very long the problems that have in the past proved so perplexing will be solved.

The view has been generally held and taught that milk contains all the required mineral elements and that if one thought the child was not receiving a sufficient amount of any one of them it was advised that more milk be taken. Such advice is ridiculous, since by actual calculation it would require each day from nine to ten quarts of the average milk now available on the American market to supply the normal requirement for a baby six months of age. That such a consumption of milk is obviously impossible does not require argument, consequently the number of babies suffering from nutritional anemia is appalling, both as to numbers and consequences.

I do not believe that physicians realize

the seriousness of this deficiency disease. I have advocated the routine practice of making hemoglobin determinations. If this is done we will probably be shocked by the information obtained, but will have learned why so many of our patients do not grow and develop as they should and why so many are in an indifferent state of health, and become the ready victims of infections.

In our iron analyses of milks we have found a variation of from 12 to 100 parts per million. We have also noted a marked variation in the content of manganese and copper, the two elements that recent investigations have shown to be vitally concerned, if not indispensable, in the metabolism of iron. It is often the case that there is a fairly regular ratio between these elements. When the iron is high the manganese and copper are apt to be high.

There has been a considerable amount of discussion as to our ability to influence the iron content of milk by the means of feeding foods rich in this element and in its metabolizing agents. The variations mentioned seems a satisfactory answer to this question, because in no other way can we account for this wide range of iron values except as a result of the diet.

You are no doubt familiar with the international controversy that has raged as to whether the body is capable of taking the inorganic preparations of iron and synthesizing them into so complex a molecule as that of hemoglobin. It is probable that these preparations of iron may be utilized in the body if the diet contains a sufficient amount of copper, arsenic, manganese, germanium, nickel or any other element that may be concerned in the metabolism of iron and these preferably in their natural organic relation as they occur in certain foods, regeneration of hemoglobin occurs promptly.

A high hemoglobin is an important, if not an indispensable factor in children's normal growth, development and well-being.

Until within the past five years it is probable that all of the essential mineral elements, iodine was the most neglected. Since then intensive studies have been conducted in this country and in Europe. These investigations have developed within the past three years

such important information as that announced by Hektoen that regardless of the form in which iodine was administered it could not be utilized until converted into thyreo globulin.

The work done by McClendon and Remington is so advanced and noteworthy that a brief mention of it should not be omitted. Each working independently have found that a constant relation exists between the iodine content of fruits, vegetables and milk and the incidence of goiter. They have also found that by feeding a lactating animal upon foods that naturally possess a high iodine content that the milk responds in a most extraordinary manner. Lunde has called our attention to the observation that when iodine is administered in its inorganic form it is eliminated within twenty-four hours, but if fed in its organic state, as it naturally exists in certain foods, it requires weeks to be eliminated. It is probable that when taken in foods it is not eliminated at all until an iodine equilibrium is established.

We do not know what are the metabolizing agents of iodine nor even their nature, but whatever they are, they are evidently present in certain foods, because, the foods produced in non-goiterous areas appear to be the only hope of materially influencing the incidence of goiter, although, the iodides have been used for many centuries and systematically for some of the worst areas for a quarter of a century the geography of goiter has not changed.

Among the more important functions of iodine in nutrition may be mentioned that it furnishes the most important element that enables the thyroid glands to synthesize thyroxin. The thyroid gland contains 65% of iodine. Thyroxin is the hormone which regulates the basal metabolic rate and determines the rate of function of all the glands and system of glands in the body. A sufficient amount of iodine in the diet of the mother increases the weight and growth of the young and makes the young strong and more apt to survive. A deficiency of iodine in the diet results in enlargement of the thyroid gland—goiter; a deficiency of this element in the diet also results in frigidity, sterility and frequent miscarriages and when the deficiency extends over several generations there may

be noted a large number of cretins, feeble minded children, congenital idiots and in adults myxoedema.

There occurs a very marked variation in the iodine content of milk in the goitrous and non-goitrous areas, the variation being between 12 parts and 1,100 parts of iodine per billion. It is probable that the water as well as the food consumed by cattle in the non-goitrous areas are determining factors in accounting for the high iodine content of milk in such areas.

The question of availability of iodine when the lactating animal has been fed an inorganic form is one upon which opinion is divided. There has recently been presented evidence to prove that inorganic iodine is rapidly eliminated by the kidneys and the mammary glands and that manifestations of iodism are not unusual. No such danger has thus far been reported as the result of the feeding of foods that naturally contain a high iodine content.

Calcium and phosphorous have been studied over a longer period of time and until recently more intensively than have any of the essential mineral elements. The same striking variations are found in different samples of milk analyzed as occur with iron and iodine. In our analyses of milk produced in the various sections of the country we find the range to be between 4,650 and 18,900 parts per million and phosphorous from 3,790 to 7,240 parts per million.

We are not yet in a position to definitely determine the full significance of these findings, but it is our observation that in those localities in which are found a high calcium and phosphorous content of milk, growth appears to be stimulated and when adult life is reached the stature is much above the average and rickets is comparatively rare.

It appears that the relation between calcium and phosphorous is not only intimate but definite and that vitamin D or a like substance cholesterol, is concerned in the utilization of both.

The important observation must not be overlooked in our consideration of calcium and phosphorous that certain foods exercise a decided decalcifying influence. Those so far identified are oatmeal and the refined

cereals such as cream of wheat and farina.

Studies of milk as a source of the several vitamins have developed the important information that the diet of the lactating animal is the determining factor. We have fairly definite information as to what foods supply these elements. So far, except in rare instances, this knowledge is of only academic interest as the average dairyman knows or cares little about the matter.

It is a hopeful sign however, to note that a few of the outstanding companies engaged in the processing of milk and in supplying fresh milk, such as the several units of the Borden Company are earnestly endeavoring at great

expense through the aid of the best scientific talent and most modern methods to not only produce milk free from bacterial contamination, but that will naturally contain in sufficient amounts those elements that are known to be essential in supplying the requirements of nutrition.

It may be of interest to you to know that provision has been made at the South Carolina Food Research Laboratory for such a comprehensive study of the influence of diet upon the milk supply and related subjects upon such a wide and comprehensive scale as has never been heretofore undertaken.

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NEWS ITEMS

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Attention has been called by Dr. G. T. Tyler, of Greenville, Chairman of the Committee, to the Post Graduate Clinics to be held at the South Carolina Sanatorium at State Park on July 29 and 30. The following physicians have been engaged to assist in holding these clinics: Dr. Paul Ringer, of Asheville, N. C.; Dr. P. P. McCain, Superintendent of the North Carolina State Sanatorium; and Dr. J. B. Sidbury, an eminent pediatric of Wilmington, N. C. In 1930 there was a large attendance of physicians and it is expected that this number will be greatly augmented this year.

The excellent program given herewith is a pioneer effort worthy of more than passing notice.

COURSE OF INSTRUCTION FOR COLORED PHYSICIANS OF CHARLESTON, S. C., HELD AT PINEHAVEN SANATORIUM

Auspices of Charleston County Tuberculosis Association

Monday, April 13

4—4:30 P. M. Topographical Anatomy of the Chest.
Types of Chests.
Methods of Examination.
Physical Signs of Tuberculosis.
Dr. W. Atmar Smith, Medical Director of Pinehaven.
4:30—5:30. Demonstration of Cases.
Dr. W. A. Smith and Dr. P. M. Huggin.
Students to examine patients.
* * *

Tuesday, April 14,

4—4:30. Modes of Onset of Tuberculosis.
Symptoms.
Physical Signs.

Mechanism of compensation in tuberculosis and its relation to physical signs.

Dr. W. Atmar Smith

4:50—5:50. Demonstration of Cases.

Dr. W. A. Smith and Dr. P. M. Huggin.

Students to examine patients.

Correlation of physical signs and X-ray films.

Wednesday, April 15

4—5 P. M. Lecture—"Pathology of Tuberculosis"

Dr. K. M. Lynch, Professor of Pathology, Medical College of South Carolina.

5—5:50. Demonstration of value of laboratory method in diagnosis and prognosis.

Dr. V. W. Rinehart

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Thursday, April 16

4—5:50. Rules in diagnosis—value—technique of eliciting.

Clinical and X-ray Demonstrations.

Childhood Tuberculosis.

Dr. W. A. Smith and Dr. P. M. Huggin.

Cases presented by students.
* * *

Friday, April 17

4—4:30. Differential Diagnosis.

Non-Tuberculous pulmonary disease.

Lung Abscess.

Dr. W. Atmar Smith.

4:30—5:50. Treatment of Tuberculosis:

Tuberculosis regimen; demonstration of special methods; artificial pneumothorax; phrenic neurectomy.

Dr. W. A. Smith, Dr. P. M. Huggin, and Dr. V. W. Rinehart.

PEDIATRICS

R. M. POLLITZER, M. D., GREENVILLE, S. C.

DIARRHEA

Although everyone knows what the term diarrhea means, yet relatively few have any adequate conception of the varied causes and types of this condition or disease. Diarrhea may be but a symptom of some parenteral malady as measles, whooping-cough, pneumonia, otitis, nephritis, or furunculosis, etc. of be induced by some enteral cause as excessive food, too high a fat content, or excessive sugar; both of which food elements result in irritative acids as end products. Then too, a very high external temperature, or very sudden change of temperature, either alone or accompanied by other factors often produces diarrhea. While no longer today do we feel so certain that bacteria are as prominent etiologically as once thought, yet there is no question but that the primary disease, infectious diarrhea is of bacterial origin, and in a way analogous to typhoid fever, which too often brings about diarrhea. The old terms entero-colitis, and ileo-colitis originated by the anatomical school of pediatricists is less often used. Cholera infantum connotes a very severe infectious diarrhea. Summer Diarrhea fairly well describes the average case. There is no question of course but that many of the infectious diarrheas are due to the dysentery bacillus, but not all may be properly called dysentery, even though there be blood and mucus in the stools. The present tendency is to label simpler food diarrheas as food intoxication, and the more serious and infectious ones as anhydremic diarrhea or infection, because of the prominence of the water loss.

Many doctors find the subject of thyroidectomy, hysterectomy, fracture, and obstetrical complications far more interesting than that of infantile diarrhea. Nevertheless just so long as most of our practitioners gladly or reluctantly do attend the sick child, it behooves them to have some understanding of this entity or symptom-complex, and to know what are the general principles of present

day treatment. For undoubtedly, regardless of a better milk supply, and to some extent more attention to child hygiene, diarrhea is still a common and at times a very serious condition in children, in South Carolina. Unfortunately in this state our state health department is handicapped by lack of funds, so that very complete data can not be collected buy them. But even so they tabulate the deaths of infants under one year separately from adults. It is probably fair to judge that the vast majority of intestinal diseases at this age is diarrhea of one kind or another. During 1928 in South Carolina, there were 584 deaths from Intestinal Diseases in South Carolina. During 1929; 389, and during 1930, 453. If these figures be multiplied by about 20 we would obtain a rough estimate of the extent of diarrheal conditions. But that of course is only for babies under one year. Probably just as many youngsters, if not more, have diarrhea during the second year as before it. During the past few years a great deal has been accomplished in decreasing the incidence and severity of the acute contagious diseases, notably diphtheria, and scarlet; but diarrhea remains rather neglected. According to the late Dr. Emmett Holt (Dis. of Infancy and Childhood, 8th Ed.) for a period of five years in New York City, of children under 2 years, there were 912 more deaths from diarrhea than from measles, scarlet fever, pertussis, typhoid and diphtheria at all ages combined. The total of these amounting to 12,439.

Granting that diarrhea in infancy is frequent and at times serious, we may well ask whether anything can be done about it. To the public health official considerable of the preventive work belongs; but the doctor who is the adviser or caretaker of the infant (where the parents recognize such an authority) can accomplish much by proper feeding and hygiene in putting the little one in the best possible position to escape diarrhea or recover if attacked. Improper nutrition, especially where too high sugars are employed

is a frequent source of trouble. Most of us have seen fat flabby pale condensed milk babies sicken and quickly die from a summer diarrhea. Other proprietary foods are also faulty. Unfortunately so little attention is paid to artificial feeding that it is most difficult to remedy this state of affairs.

In the treatment of diarrhea, although the numerous details may seem a bit perplexing, yet after all the general principles are few and simple. It can be said at the outset, that in this disease drugs do not play a prominent part, nor have we any specific. It has been stated by some that as a rule more harm than good is done by drugging. Quinine is particularly pernicious. To give a weak infant suffering from excessive peristalsis, calomel or castor oil and especially to repeat it, and thereby increase peristalsis does seem a bit illogical. But milk of magnesia seems less harmful, and mineral oil is at times of value. Enemas if simple and used in moderation are often helpful, but should not be a routine practice. On the other hand to bend all efforts to check the diarrhea, especially in the presence of high fever and other signs of toxemia is not wise. Too often the patient is disregarded and the whole thought put on the diarrhea. The vast majority of patients who are skillfully treated, unless already seriously injured by bad feeding will recover provided due consideration is given to their fluid intake and they are given some food. But at the beginning of any type of diarrhea a decrease of food, or more often withdrawal of all food (and that means milk) for 12 to 24 hours is the best procedure. Mild cases will recover from this alone. However during this starvation period, water in abundance as plain water, or water sweetened with saccharin or barley water or rice water must be given. Once severe dehydration has set in there are profound metabolic disturbances which are difficult to overcome. When water can not be taken by mouth because of unwillingness or vomiting, some other avenue must be used. If the rectum is not tolerant as is usually the case, then normal salt solution or Ringers can easily and advantageously be put into the peritoneal cavity.

While this unless done too late almost always brings about a prompt and marked

improvement, yet too often it is not repeated. It may be necessary daily for a week or more: but generally from one to three will suffice. In some toxic infants especially those who have dysentery or infectious diarrhea a transfusion is life saving. Whether this be because of stimulation in the patients hematopoietic organs or because of providing anti-bodies is not at all clear and practically makes little difference. Sidbury of Wilmington is a warm advocate of this procedure. Unfortunately at times there is considerable difficulty in the technique, and here too at times repetition is necessary. Of course the bloods must be matched.

There has been much argument as to how a diarrhea patient should be fed, and quite naturally so, because when we say diarrhea, we may mean anything from a mild upset due to excessive sugar or too much food up to a rapidly fatal dysentery. It has been found in general that cows milk unchanged is about the worst thing that can be given. But milk with the fat removed, and with an acid as lactic acid is often tolerated and if given in small amounts and with very little or no sugar not only prevents starvation but is very helpful. Gradually as there is improvement sugar may be added or increased. Later on the fat may be put back. Some men use casein or a similar preparation with diluted milk. That is they increase the protein content. Protein forms solid material, and seems not only to change the intestinal flora, but to act mechanically. For the same reason, eiweismiech or protein milk, with its high protein and low fat and sugar is highly thought of. Strange as it may seem unless one forgets the diarrhea and considers the patient, a high carbohydrate diet, especially one containing starches and sugars is sometimes of more value than a protein one. But regardless of what is put into the intestine where the patient is in serious condition the giving of glucose in 5% solution intravenously frequently is of great benefit.

Although in general drugs are not used, where the infant is losing much water from the bowel, and especially where there is much pain it is only right to give paregoric or some form of opium. It should never be given routinely, however. For restlessness

or delirium, codein, bromides or luminal are of service. The proper management of a case, calls for just as much, perhaps more skill than for one of typhoid or pneumonia. But in general provided one does not persist in purging, does not fill the stomach with drugs that produce vomiting and destroy appetite, and above all combats dehydration and then

prevents starvation the out-look except in late cases and bad subjects is in the vast majority of cases excellent. Every case of diarrhea no matter how trivial is worthy of earnest and prompt attention; for only in this way can one be sure that his little patient has had a square deal.

S U R G E R Y

Wm. H. Prioleau, M.D., Charleston, S. C.

INFECTIONS OF THE TERMINAL PHALANX OF THE THUMB II

PARONYCHIA

Paronychia of the thumb nail is a common and troublesome infection, though it is neither very painful nor dangerous. Its course can be shortened and the nail often saved by proper treatment instituted early. It is considered along with other infections of the thumb in an article by Harry Berman, M. D., and M. I. Strahl, M. D., published in the American Journal of Surgery February, 1931. The subject matter presented here is an elaboration of a portion of this article.

These infections usually begin at the site of hang nails, generally on the lateral border. At first there is localized redness and swelling and considerable tenderness. Should the infection not subside at this point, it next burrows under the lateral edge of the nail and finally separates it from its matrix in the proximal third. There is then a general reddening and thickening of the cuticle with pus exuding between it and the nail. This condition may continue for weeks or months. It is not likely to spread or to involve the bone. The preventative treatment is the protection of raw areas from hang nails. Once there is redness and swelling hot soaks should be used for a day or two. Should this be ineffectual it will be necessary to make a small incision into the indurated area under a

novocain block of the digit. Generally a drop of pus is found. The edges of the incision should be kept apart for a day or two and hot soaks should be used. With this treatment the infection generally subsides if it has not advanced too far. Even though it does subside at this point, sometimes the nail is lost and a new one forms.

Once the infection has separated the base of the nail from the matrix there is no use of temporizing. The nail should be cut across between its proximal and middle thirds by inserting the blade of a scissors from one edge to the other. The separated lower portion of the nail should be avulsed or excised, care being taken to remove the nail tissue from the proximal angles. It might be necessary to make a flap of the eponychium by making two lateral incisions. A median incision should not be used as it might result in a split nail. A strip of rubber tissue or gauze should be inserted between the eponychium and the matrix. A new nail will form in the course of time if the root has not been too badly destroyed, as it seldom is. It is better to leave the nail over the distal two thirds of the bed as it affords considerable protection. Other methods of treating this condition are simply a waste of time.

The foregoing applies equally to paronychia of the fingers and toes, though the condition is not very common in the latter.

MINUTES

MINUTES

of the

SOUTH CAROLINA MEDICAL ASSOCIATION

Eighty-third Annual Scientific Session

Greenville, May 5, 6, 7, 1931.

The South Carolina Medical Association convened in general session in the ballroom of the Poinsett Hotel, Greenville, on Wednesday, May 6, 1931, at nine a. m. and was called to order by the President, Dr. Kenneth M. Lynch, Charleston.

Invocation

Dr. George W. Quick, Pastor First Baptist Church,
Greenville

Our Father, we bow before Thee. How vain is life unless living is correct; how futile are all our endeavors unless we try to do the will of our Maker. In the very beginning of these exercises we bow before Thee for Thy blessing. We believe in God, the Father Almighty, and we pray for a Father's blessing upon all the activities of this convention. We thank Thee for the blessing that has come to the human family through the ministrations of relief of the great profession under whose auspices we are meeting this day. We pray Thy blessing upon all these delegates and upon those who are to lead the discussion on these great and important subjects. We pray that they may realize that they are having to do with the human welfare, that they are having to do with Thy children upon the earth. May those who go in and out of the sickroom remember the words of the Great Physician: "Inasmuch as ye have done it unto one of the least of these, ye have done it unto me." Suffer none of us to live for a moment in alienation of thought or in opposition in activity to our God but to remember that we have a place in His thought and that He is so gracious that He does not put any of us out of His mind but has set His heart upon us and loves us and has ordained grace whose mission is to make us holy even as He is holy. Unto Thee now we commit this convention, for the work's sake, and we ask it in Jesus' name. Amen.

Address of Welcome

Dr. Irving S. Barksdale,
President, Greenville County Medical Society

Mr. President and gentlemen:

On behalf of our local chapter I wish to give you a you a most hearty welcome to our city. We hope you will enjoy your stay here to the utmost. In fact, the local committee has gone to no end of detail to give you a good program, and we hope every-

thing will come out all right. We think our Program Committee is deserving of a great deal of credit for all they have given us this year, for it seems to us one of the best programs we have ever had, with the gentlemen coming from afar—Dr. Kolmer and Dr. Lewis—and also the essayists from the state. We are sure you will enjoy it. We bid you all welcome; we hope you will feel at home and that you will enjoy every minute of your stay with us.

Response to Address of Welcome

Dr. Charles A. Mobley, President-Elect, Orangeburg
Mr. President, Dr. Barksdale, and members of the South Carolina Medical Association:

It is with a great deal of pleasure that I accept for the South Carolina Medical Association this welcome which Dr. Barksdale has so graciously extended. Every member of this Association felt sure that this welcome awaited him and looked forward to this meeting with anticipation. We are here in the spirit, it seems, of organized medicine—not organized for profit or gain but for the advancement of scientific thought and achievement. If this is true, it follows that we must be organized for the benefit of mankind.

In Greenville I see exemplified the spirit of the new South, which by constant endeavor has brought itself to the forefront of commercial achievement. As I think of Greenville there are two things that stand out—the natural beauties of your city and surroundings and, second, your wonderful textile development. South Carolina is fast becoming the center of the textile industry of the United States, and to me it seems the future of your city is assured.

I wish to thank you again for your cordial welcome, Dr. Barksdale, and to accept for the South Carolina Medical Association your hospitality.

* * *

The President, Dr. Lynch, read his address, entitled "Alert Medicine."

PRESIDENT LYNCH:

Gentlemen, we have the honor and pleasure of having with us this morning the fraternal delegates from the Medical Association of Georgia. I shall ask Dr. A. G. Fort, of Atlanta, Georgia, who is the President-Elect of the Medical Association of Georgia and also one of the fraternal delegates to our meeting, to rise and say a word about our relations with the Georgia Association.

DR. A. G. FORT, PRESIDENT-ELECT, MEDICAL
ASSOCIATION OF GEORGIA, ATLANTA, GA.:

Mr. President, and members of the South Carolina Medical Association:

It is a great pleasure to be present at this meeting and it is a greater pleasure to hear your paper, Mr. President, on a subject which I think faces the medica-

men of this country. Never (at least during my short career) has there been as much written and as much thought as to what we are really facing as there has been during the last eighteen months or two years. The doctor has presented it in a wonderful way, and his address is well worthy of our close study and thoughtful and prayerful consideration. He failed to state that one state in our Union has even gone so far as to have presented a bill leading toward state medicine, in that it offered to organize that state in such a way as the United States Navy medical service is organized. That is the state of Massachusetts. Whether they have passed that Bill, or not, I do not know: it may be it is still up for consideration. I happen to have a copy of that bill. Unless we remember that it is our duty to provide the people with medical care (it is their right to have medical care, and it is our duty to supply it), if we fall down on that, lay organizations and the state are simply going to take it over and see that they have it. We must remember that the health of the individual comes first, and they are going to have medical care, irrespective of how we feel toward state medicine.

It is a pleasure and a privilege to be here and to extend greetings from the state of Georgia. I invite all of you to meet with us at our state meeting in Atlanta next week.

PRESIDENT LYNCH:

We have another distinguished visitor with us, Dr. Stewart R. Roberts, of Atlanta, who is our other fraternal delegate from the Medical Association of Georgia. We shall be glad to have a word from Dr. Roberts.

DR. STEWART R. ROBERTS, ATLANTA, GA.:

Mr. President and gentlemen:

It is a pleasure to be here. I enjoyed the President's address and enjoyed Dr. Fort's remarks. I enjoyed the President's reference to the fact that we know but little of mental hygiene and probably the next development in scientific medicine will be the opening up of the mind in its relation to disease. We need leadership in the profession. We are in the midst of great changes, and we are being led and are not leading. It is a time for grave and deep thought. My own solution is sickness insurance. Forty of the forty-one leading countries in the world have it; we are the only one that has not.

I am glad to be here again and am glad to have heard this address. I always esteem it a pleasure and an honor to come to South Carolina.

* * *

The following papers were read as a Symposium on Psychiatry:

"Introspection as the Result of Medical Examination" by Dr. C. F. Williams, Columbia.

"The Mental Conditions Which May Complicate Organic Disease" by Dr. Olin B. Chamberlain, Charleston.

"The Psychoneuroses" by Dr. J. M. Beeler, Spartanburg.

The papers comprising the symposium were discussed

by Drs. J. H. Gibbes, Columbia; W. P. Beckman, Columbia; Stewart R. Roberts, Atlanta, Ga.; and in closing by Dr. Williams, Dr. Chamberlain, and Dr. Beeler.

Dr. H. S. Black, Spartanburg, read his paper entitled "Præcox Pubertas in the Child Associated with Malignant Ovarian Tumor—Report of a Case."

Dr. A. E. Baker, Jr., Charleston, read his paper entitled "Pathology and Treatment of the Diseased Cervix," (illustrated by lantern slides) which was discussed by Drs. Douglas Jennings, Bennettsville, and A. F. Burnside, Columbia; and in closing by Dr. Baker.

At this point the President announced the clinics to be held on Thursday afternoon and then read a telegram of greetings received from Mr. C. P. Loranz, Secretary-Manager of the Southern Medical Association, Birmingham, Ala.

Dr. F. M. Routh, Columbia, read his paper entitled "Asthma, Hay-fever, and Other Allergic Conditions," which was discussed by Drs. J. Heyward Gibbes, Columbia, and E. F. Parker, Charleston; and by Dr. Routh in closing.

The following two papers were read:

"A Clinical Appraisal of Spinal Anesthesia"

by Dr. J. R. Young, Anderson.

"Experience with Spinal Anesthesia" by

Dr. George H. Bunch, Columbia.

These two papers were discussed by Drs. C. B. Earle, Greenville; A. F. Burnside, Columbia; and Calvin B. Stewart, Atlanta, Ga.; and in closing by Dr. Young.

Dr. William H. Prioleau, Charleston, read his paper entitled "Hyperthyroidism Following Thyroidectomy," which was discussed by Drs. O. B. Mayer, Columbia; Stewart R. Roberts, Atlanta, Ga.; and L. W. Reeves, Greenville; and in closing by Dr. Prioleau.

Dr. D. LeSesne Smith, Spartanburg, read a paper on "The White House Conference on Child Health and Protection," which was discussed by Dr. William Weston, Columbia.

The morning session then adjourned, at 1:07 p. m.

Wednesday Afternoon Session

The Association convened in the ballroom of the Poinsett Hotel and was called to order at three p. m. by the President.

Dr. William Weston, Columbia, read his paper entitled "Neglected Determining Factors in Infant Feeding."

President Lynch announced that the program for the afternoon had been somewhat disarranged by the unavoidable detention of Dr. Kolmer, who would probably not arrive until Thursday, stating that the papers following Dr. Kolmer's would be taken up in order until Dr. Kolmer's arrival.

The paper of Drs. J. R. Allison and P. V. Mikell, Columbia, entitled "Sarcoid Associated with Tuberculosis of the Larynx—Case Report," was read by Dr. Allison and was discussed by Dr. Mikell and by Dr. George T. Tyler, Greenville.

Dr. B. A. Henry, Anderson, read his paper entitled

"Medical Economics," which was discussed by Drs. J. R. Young, Anderson; Davis Furman, Greenville; E. A. Hines, Seneca; and in closing by Dr. Henry.

Dr. I. Jenkins Mikell, Columbia, showed a moving picture demonstrating operations for senile cataract. This subject was discussed by Drs. P. G. Jenkins, Charleston; E. W. Carpenter, Greenville; and Dr. Timmons, Columbia; and in closing by Dr. Mikell.

Dr. W. G. Byerly, South Carolina Sanatorium, State Park, read a paper entitled "The Aid of X-Ray Films in Confirming the Diagnosis of Chest Conditions" (illustrated by X-ray films), which was discussed by Drs. S. E. Lee, Greenville, and T. A. Pitts, Columbia, and by Dr. Byerly in closing.

The President called for the last two papers appearing on the program, those of Dr. Whitten and Dr. Summer, but neither was present.

The program having been completed so far as possible, the afternoon session adjourned at 5:07 p. m.

Thursday, May 7

A Clinicopathological Conference was conducted by the President, Dr. Kenneth M. Lynch, Professor of Pathology, Medical College of the State of South Carolina, in the ballroom of the Poinsett Hotel at eight-thirty a. m. and assisted by Dr. Robert Wilson.

The Association convened in general session at nine a. m. and was called to order by the President.

The following papers were read as a Symposium on Obstructive Uropathy:

"Stones" by Dr. L. P. Thackston, Orangeburg.

"Vesical Neck Obstruction" by Dr. J. J. Ravenel, Charleston. (Illustrated by lantern slides.)

"Strictures and Kinks of the Ureters" by Dr. W. R. Barron, Columbia.

"Obstruction to Urethras" by Dr. Milton Weinberg, Sumter.

On motion of Dr. Hines, the privileges of the floor were extended to visiting urologists.

The President stated that the Association's two distinguished guests, Dr. John A. Kolmer and Dr. Dean Lewis, were present and extended the privileges of the floor to them.

The papers in the symposium were discussed by Drs. T. M. Davis, Greenville; Dr. Marion H. Wyman, Columbia; and in closing by Drs. Thackston, Barron, Weinberg, and Ravenel.

* * *

PRESIDENT LYNCH:

Gentlemen, we have now come to the special order of business, the addresses of our invited guests. The subject of the first address was deliberately selected because of the misunderstanding and lack of understanding which exists in the profession about vaccines and vaccine therapy. The man to present the subject was also deliberately chosen and did us the honor to accept our invitation. Twenty years ago, as fellow instructors at the University of Pennsylvania, John Kolmer and I commenced to know each other. Having followed his work for this period of time, I knew there

was no man who could better present this subject for your benefit, than Dr. Kolmer. As a student, as a teacher, as an indefatigable scientific worker and author, he stands as the leader of immunologists in this country. It is now my peculiar pleasure and honor to introduce to you Dr. John A. Kolmer, Professor of Pathology and Bacteriology in the University of Pennsylvania, Philadelphia, who will speak to us on the subject of "The Practical Application of Vaccine Therapy in the Prophylaxis and Treatment of Disease." Dr. Kolmer.

DR. JOHN A. KOLMER, PROFESSOR OF PATHOLOGY AND BACTERIOLOGY, UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA:

Mr. President, ladies and gentlemen:

I feel deeply the honor of delivering this address and meeting with you this morning and hope that you will also accept my apologies for being absent yesterday. The circumstances were beyond my control. It was a great disappointment to me personally, but I repeat that I appreciate this great privilege of being with you this morning.

* * *

Dr. Kolmer then addressed the Association on the subject of "The Practical Application of Vaccine Therapy in the Prophylaxis and Treatment of Disease." the address being illustrated by lantern slides.

* * *

PRESIDENT LYNCH:

I am confident that this Association will agree with me that our anticipation has not been misplaced and that our appreciation is too great to be adequately expressed. I want to impress upon you that while there are some opinions of Dr. Kolmer's in this paper based upon deep and long experience, there are also some fundamentals which the medical profession is continually violating and therefore subject to wide error in the field of medical practice. Therefore I want to urge that when this paper is published you read it in detail again and thereby mature the information which Dr. Kolmer has brought to us.

Dr. Kolmer has come to us at no little inconvenience on his part, and I want to express to him the deep gratitude of this Association for his contribution to our program, and I shall ask the Association to give visible expression of its appreciation by standing.

The members of the Association stood, in response to the President's suggestion, and applauded.

PRESIDENT LYNCH:

Ladies and gentlemen, we are doubly honored this morning. I am going to give the pleasure and privilege of presenting our other invited guest to Dr. G. T. Tyler.

DR. G. T. TYLER, GREENVILLE:

Our next guest, ladies and gentlemen, is a man about whom we know a great deal, or at least we know a great deal about the place from which he comes. He is a surgeon. Out of sympathy, I am not going to tell you all of his morbidity or all of his mortality. I hesitate also to tell you too much about him; there I thought it would be appropriate to tell him about

you. But I went to the registration desk a while ago and found there were three hundred and fifty people registered about whom I should have to speak if I tried to tell Dr. Lewis who you are, and that would take too long. Therefore I am going to sum it up by telling Dr. Lewis we are all good fellows, and though yesterday some of us were wet it was from the outside, I think, though a few may have been wet on the inside. I can sum it up by saying to Dr. Lewis that it is always fair weather when good fellows get together. I present to you now Dr. Dean Lewis, Surgeon in Chief of Johns Hopkins Hospital, Baltimore.

Dr. Dean Lewis, Surgeon in Chief, Johns Hopkins Hospital, Baltimore, Md., read his paper on "Surgical Lesions of the Stomach and Their Treatment."

PRESIDENT LYNCH:

Ladies and gentlemen, I am sure that you will agree with me again that we are heavily indebted to our other distinguished guest of the morning. Dr. Lewis has also come to us at no little inconvenience to himself and for our good. We have no means of repaying to him our indebtedness, and I suggest that you manifest your appreciation by a rising vote of thanks to Dr. Lewis.

Dr. Lewis was given a rising vote of thanks, with applause.

After again announcing the clinics to be held in the afternoon and requesting everyone present to register, the President called for Dr. Whitten's paper.

Dr. B. O. Whitten, Superintendent of the State Training School, Clinton, read his paper entitled "Selective Sterilization," which was discussed by Dr. F. M. Routh, Columbia, and in closing by Dr. Whitten.

On motion of Dr. W. P. Timmerman, Batesburg, the Association adopted a resolution of thanks to the physicians of Greenville, their families, and all who took part in making the meeting so delightful and so beneficial and pleasureable.

PRESIDENT LYNCH:

I am going to take at this time the opportunity to present to you the man whom you have honored by making him your President-Elect, Dr. James R. Young, of Anderson. Dr. Young.

DR. JAMES R. YOUNG, ANDERSON, PRESIDENT-ELECT:

Mr. President and members of the Association:

I suppose for about ten more minutes I shall be your President sub-Elect. My friend Charlie Mobley will then become President, and I shall be your President-Elect.

I once heard of a man who was elected president and told his audience that they had shown rare judgment. His attitude was that of the Pharisee who went up to the temple to pray and spent his time telling God what a fine fellow he was. I must say that I am not worthy of this signal honor you have conferred upon me. You have seen fit to elect me your President-Elect, and I want to assure you that I deeply appreciate it. I do bring to the office the spirit of humility. In a book I have read recently, by Wilson, on the subject

of Sir James Mackenzie, I saw this statement: "If I were asked the first step in the quest for truth, I would answer 'Humility'; if I were asked the second step in the search for truth, I would say 'Humility'; and if I were asked the third step in the quest, I would say the same." Realizing the truth of that statement, I must say I do bring to this office the spirit of humility. One of the sweetest things I ever heard said of a doctor was this of a French doctor: "He left the memory of a man unspoiled." I assure you that this high honor you have given me shall not spoil me. I appreciate it deeply and pledge you my sincere effort, and I solicit your hearty cooperation. (Applause.)

PRESIDENT LYNCH:

Mr. Secretary, is there any further business?

SECRETARY HINES: None.

PRESIDENT LYNCH:

I want to express my very sincere personal appreciation to Dr. Lewis and Dr. Kolmer, our visiting guests, who have made the climax of this meeting so brilliant, and also my personal appreciation to the committees and the Woman's Auxiliary for their work during this year. I also thank the local committees on arrangements for their splendid work in preparing for this meeting and carrying out so well all the details of it. I now declare the meeting adjourned until two p. m., when the various clinics will take place.

In addition to the clinics as listed in the program, there will also be a tuberculosis clinic at the Greenville County Tuberculosis Hospital.

The Association will now adjourn until the next annual meeting in Columbia.

The Association adjourned *sine die* at twelve-thirty p. m.

MINUTES OF THE HOUSE OF DELEGATES CONTINUED

REPORT OF THE SECRETARY

DR. EDGAR A. HINES, SENECA, S. C.

On April 11, 1905, this House of Delegates met here in Greenville for the first time. Your present Secretary was a charter member. There are a number of interesting comparative details that might be mentioned if time permitted, for instance, Secretary Whaley reported the membership at that time to have been three hundred and eighty five members. The Treasurer reported cash on hand two hundred and sixty two dollars and twenty two cents. It is worthy of note that the Chairman of the Scientific Committee presented a brief report as follows:

"Several members of the Committee interested themselves and fifteen letters were written requesting members to prepare papers. Only two answers were received, both declining to write on the subject selected."

The splendid program provided by the Scientific Committee at this session shows a vast improvement in the interest of the members in responding to the request for papers.

During recent months your Secretary was requested

to look into the matter of the precedents of electing a President of the Association from the membership of the local society in which place the State Medical Association held its annual meeting. Regardless of the policy followed by the Association in subsequent years it should be known that at the first meeting of the House of Delegates the precedent was established of electing a member of the local society President of the Association at the time of the annual meeting. Dr. Davis Furman of Greenville was so honored.

Another important event at the first meeting of the House of Delegates was the authorization of the publication of a State Journal. This was done on the recommendation of President Robert Wilson but the idea had germinated in the mind of the late Dr. Walter Porcher who filled the office of Secretary of the Association for fifteen years. This was a bold venture for such a small state but the Journal has been a success never having missed a single issue. The first editors were: Dr. Robert Wilson, Editor in Chief, Dr. T. P. Whaley and Dr. C. P. Aimar, Associate Editors.

Coming now to the report for the fiscal year which closed December 31, 1950, there was a slight falling off of the paid up membership which numbered 783, a loss of thirty members. On the other hand the enrollment reported by the American Medical Association on May 2, 1951 numbers 857. Undoubtedly economic conditions account for some failure in the collection of dues on the part of County Officers. Then again, for several years a consistent campaign urging increased membership had been under way. Owing to the economic situation it was thought best not to push the matter so strenuously until the financial situation improved.

It is believed that the year 1951 will show practically normal conditions so far as the expected paid up enrollment is concerned.

There has been a continuing interest in the scientific programs all over the state. There are very few societies now not inspired by contact with the splendid district meetings or the progressive larger neighboring county societies. Much of this keen interest is due to an unusually able official personnel of the various societies. For the most part this leadership has been supported in a whole-hearted manner by the members of their respective societies. There has been no let up of activities from a scientific standpoint during the period of financial depression.

It is worthy of note that few complaints of any sort have reached the Secretary's office. This would indicate that a spirit of harmony prevails to a large extent. Your Secretary has visited practically every section of the State during the past year and thus kept in touch with the majority of the membership. Your Secretary attended many other meetings in various parts of the country among them the meeting of Secretaries and Editors in Chicago. November, 1950. This particular meeting was given over largely to a virile discussion of medical economics. Your Secretary on the invitation of President Hoover attended the White House Conference on Child Health and Protection in Washington, February 19. The

South Carolina Medical Association will be called upon to participate in the follow up of this the greatest work ever undertaken anywhere in the world in the interest of Child Welfare. Your Secretary was an invited guest at the recent meeting of the North Carolina Medical Society and read a paper there in the Section on Pediatrics.

In looking over the programs of medical societies of other states one is impressed with the increasing attention being paid to the various phases of medical economics and to the relationship of the private practitioner to public health. It would appear that an even larger space may be accorded these subjects the coming years. The machinery of organized medicine seems to be little short of perfection. Future trends may well pursue the lines of simplification. There may be too many medical societies. With this duplication of effort it is probable that the county medical society in many instances is losing ground. In our own state as in others the small county society continues to have a difficult struggle for existence. All too often it is a society in name only. There continues to be a gradual decrease of South Carolina doctors notwithstanding the steadily increasing population. There are not more than one thousand active practitioners in the state at the present time. There has been little complaint however of any actual shortage of medical attention on the part of the public.

In conclusion your Secretary believes that the past year has been generally a satisfactory one from the standpoint of organized medicine in South Carolina.

The following report was presented by the Chairman of the Council, Dr. S. E. Harmon.

Seneca, S. C.
April 29, 1951

Dr. E. A. Hines, Secretary-Treasurer,
South Carolina Medical Association,
Seneca, S. C.

Dear Sir:—

Attached hereto you will find report covering the annual audit of the books of the South Carolina Medical Association and the Journal of the South Carolina Medical Association.

While a slight decrease in membership is noted, this is offset by an increase in advertising receipts. There has also been a substantial reduction in expenses, resulting in income exceeding expenditures by \$648.50.

Yours truly,
(Signed) Frances R. Richardson,
Auditor

REPORT OF SOUTH CAROLINA MEDICAL ASSOCIATION

Receipts

Balance in Seneca Bank Jan. 1, 1950.....	\$ 550.56
Membership Dues, 1950.....	2,159.00
Membership Dues, 1951.....	15.00
	<hr/>
	\$2,704.56

Disbursements

Printing.....	\$1,039.12
Traveling Expenses Secretary.....	175.00
Expenses two delegates to American Medical Association.....	220.00
Expenses Official Stenographer of Convention.....	165.42
Annual Audit.....	50.00
Expenses Dr. E. A. Park, Convention Guest.....	48.72
Stamps and Sundries.....	50.00
Cash in hand Dec. 31, 1930.....	110.00
Cash in banks Dec. 31, 1930.....	846.30

\$2,704.56

Statement of Assets

Cash in defunct Seneca Bank.....	\$ 559.15
Cash in South Carolina Savings Bank.....	487.17
Cash on hand.....	110.00
Office Furniture and Fixtures.....	704.77

\$1,661.07

No Liabilities.

Statement of Journal South Carolina Medical Association

Receipts

Balance in Seneca Bank Jan. 1, 1930.....	\$1,356.94
Certificate of Deposit Seneca Bank.....	1,000.00
Interest on certificate of deposit.....	3.33
Subscriptions.....	1,449.90
Advertising.....	2,835.61
Sundries.....	50.00

\$6,695.78

Disbursements

Salaries.....	\$2,770.20
Stamps.....	20.00
Printing.....	919.30
Office Expense.....	228.63
Traveling Expenses Sec. Editor.....	25.00
Sundries.....	132.95
Cash in banks Dec. 31, 1930.....	2,599.70

\$6,695.78

Statement Of Assets

Cash in defunct Seneca Bank.....	\$ 626.70
Certificate of deposit defunct Seneca Bank (balance).....	601.99
Cash in South Carolina Savings Bank.....	1,371.01

\$2,599.70

Total Assets of S. C. Medical Association and Journal

Medical Association.....	\$1,661.07
Journal.....	2,599.70
	<u>\$4,260.77</u>

No Liabilities.

NUMBER OF MEMBERS BY COUNTIES

	Paid	Hon.
Allendale.....	6	
Aiken.....	11	
Anderson.....	42	7
Abbeville.....	6	2
Bamberg.....	10	
Barnwell.....	6	
Beaufort-Jasper.....	8	
Chesterfield.....	10	
Clarendon.....	2	
Colleton.....	6	
Columbia.....	88	14
Chester.....	9	5
Cherokee.....	8	3
Charleston.....	89	4
Dillon.....	7	
Darlington.....	12	1
Edgefield.....	1	
Florence.....	31	1
Fairfield.....	5	
Greenwood.....	14	
Georgetown.....	2	
Greenville.....	82	5
Horry.....	12	
Hampton.....	8	
Kershaw.....	14	
Laurens.....	15	5
Lexington.....	5	1
Lancaster.....	7	
McCormick.....	1	
Marlboro.....	8	1
Marion.....	15	
Newberry.....	18	1
Orangeburg.....	21	1
Oconee.....	7	4
Pickens.....	11	2
Spartanburg.....	50	3
Sumter.....	17	5
Saluda.....	4	
Union.....	7	1
Williamsburg.....	9	
York.....	29	4
	<u>713</u>	
Honorary Fellows.....	70	
	<u>783</u>	

SOCIETY REPORTS

SPARTANBURG COUNTY MEDICAL SOCIETY MEETS

The meeting was called to order by the President, Dr. Harry E. Heinitsh, Jr., May 25, 1931, and the minutes of the April meeting were read and approved.

Dr. Wm. Allan of Charlotte, N. C., discussed, "The Causes of Upper Respiratory Infections." Dr. Allan stated that except for diphtheria and type I pneumonia there was no specific therapy for these infections. A new serum has recently been tried out in streptococcus pneumonia, and although it has only been used in a few cases, it seems to offer some hope to these patients. Recent research work is also being done on the causation of the common cold and influenza and it is believed that these two common conditions are probably due to a filtrable virus.

Dr. E. J. Wannamaker of Charlotte, N. C., read a very interesting paper entitled "Pneumonitis and Lung Abscess."

Dr. James W. Gibbon of Charlotte, N. C., read a very able paper entitled, "A Consideration of Pulmonary Abscess from the Surgical Viewpoint."

Dr. Gibbon stated that tonsillectomy and other oral operations were the most frequent cause of lung abscess. Lung abscess also sometimes follows appendectomy.

Dr. Gibbon stated that postural drainage, bronchoscopy and phrenicectomy should be tried before operation. As a rule, operation should not be delayed longer than ten weeks. The position for postural drainage is best determined by means of postero-anterior and lateral films of the chest. Bronchoscopic aspiration is very valuable in locating the site of the abscess and in determining whether or not stenosis is present. Repeated aspirations are very effective in treatment of lung abscess, especially, when the abscess is centrally located. Phrenicectomy combined with bronchoscopy can be used to good advantage. Artificial pneumothorax is usually not done in that there is danger of disseminating the infection. Surgery is very valuable in the treatment of peripheral abscess and also in the treatment of abscesses in other portions of the lungs which do not respond to the measures already mentioned above. The most important problem is to select the proper time for this operation. This is best done by serial x-ray films. As a rule, operation should not be done before the area of pneumonitis surrounding the abscess cavity has disappeared. A sharp line of demarcation should be present. The abscess should be carefully localized by postero-anterior and lateral views of the chest before operation. Upper lobe abscess can usually be best reached through the antero-lateral wall of the chest and the lower lobe abscess can usually be reached through the postero-lateral or posterior walls of the chest. It is best to do this operation in two stages. An opening is made down to the lung at the first

operation and the skin closed. Five days later the abscess is opened and iodoform gauze is packed into the abscess cavity. The selection of the optimum time for operation is the greatest single problem in the treatment of lung abscess.

Dr. V. K. Hart of Charlotte, N. C., showed some lantern slides illustrating the value of bronchoscopy as an aid in the differential diagnosis of pulmonary suppuration and also illustrated the value of bronchoscopy in the removal of organic and inorganic foreign bodies and the value of bronchoscopic aspiration.

Dr. C. C. Phillips of Charlotte, N. C., showed some films of infants before and after treatment of the thymus gland. Dr. Phillips stated he believed that part of the symptoms were due to toxemia. Dr. Phillips also showed films illustrating Hodgkins disease and metastatic sarcoma and syphilis of the lungs.

There being no further business the meeting adjourned.

Dr. H. E. Heinitsh, Jr., Pres.

Dr. W. M. Sheridan, Sec.-Treas.

SPARTANBURG COUNTY MEDICAL SOCIETY MEETS

The meeting was called to order by the President, Dr. Harry E. Heinitsh, Jr., April 27, 1931, and the minutes of the March meeting were read and approved.

Dr. Harry Ross presented a patient with chronic bronchiectasis and a small diaphragmatic hernia on the left side.

Dr. Julian A. Moore, of Asheville N. C., read a very able paper on the "Surgical Treatment of Pulmonary Tuberculosis." Dr. Moore's paper was illustrated with lantern slides. He stated that phrenicectomy by paralyzing the diaphragm caused 25 to 35 per cent of the small cavities to close and heal. Phrenicectomy may also be used as a complement to thoracoplasty. It is valuable in the treatment of acute progressive caseous tuberculosis and also in the early forms of basal and apical tuberculosis involving a single lung.

Resection of a portion of the first two intercostal nerves also produces a partial collapse of the lung. The lungs may collapse fifty per cent by subperiosteal resection of six inches of the first to the tenth ribs close to the spine. As a rule artificial pneumothorax should be tried before thoracoplasty. Surgical measures as a rule, shorten the time of bed rest in cases of pulmonary tuberculosis and in many cases cavities heal. It is particularly valuable when the disease is confined to one lung.

Dr. A. B. Craddock discussed the general diagnosis and medical treatment of pulmonary tuberculosis including artificial pneumothorax and showed some very interesting films.

There being no further business the meeting adjourned.

H. E. Heinitch, Jr., M. D. Pres.
W. M. Sheridan, M. D., Sec. Tr.

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, MAY 12TH, 1931, AT 8:30 O'CLOCK

The meeting was called to order by the Vice President, Dr. H. W. de Saussure.

Present: Doctors: A. E. Baker, Jr.; Ball; Banov; Beach; Boette; Bowers; Buist; Byrnes; Cannon; Cathcart; Deas; de Saussure; Elston; Hope; Johnson; LaRoche; Lynch; McCrady; Mitchell; Pearlstine; F. R. Price; Prioleau; Ravenel; W. M. Rhett; W. P. Rhett; Richards; Rutledge; Sanders; Scott; W. A. Smith; Waring; Whaley; I. R. Wilson; Huggins. (34)

Guests: Dr. E. P. Alyea and Dr. A. R. Shands, of Duke University, Durham, N. C.; Dr. Bruce Mayne of the United States Public Health Service. Dr. R. E. Remington, of the Medical College; and Dr. Hillyer Rudisill, of Roper Hospital.

The minutes of the meeting of April 28th were read and confirmed.

Under reports of Officers and Committees, Dr. T. E. Bowers submitted the following resolutions on the death of Dr. William Simons:

Dr. William Simons was born in Summerville, November 3rd, 1894, and died there March 27th, 1931. He obtained his pre-medical education at the College of Charleston, graduated from the Medical College of the State of South Carolina in 1919, and after serving an internship in Roper Hospital, continued his training at Willard Parker Hospital in New York City. Upon completion of this work, he returned to his native home in Summerville, where he quickly established for himself a high place in the esteem of the community.

Dr. Simons' activities as a general practitioner were constant and varied. His chief interest lay in pediatrics, and in this and the other lines of his practice, he demonstrated his ability and conscientiousness, of which the widespread sense of loss in his death is ample witness.

The Medical Society of South Carolina has lost a worthy member. Therefore, be it resolved that a page in the minute book be inscribed to the memory of Dr. William Simons, and that copies of this resolution be sent to his family and to the newspapers of Charleston and Summerville.

This was adopted by a standing vote.

Under Miscellaneous Business, Dr. Edward Rutledge presented for consideration of the Society, the following proposed change in the By-Laws: Chapter V, Section 2, to be changed to read as follows:

The annual dues shall be Fifteen Dollars (\$15.00). Ten Dollars (\$10.00) shall be payable in advance on January 1st of each year, and Five Dollars (\$5.00) payable on October 1st. Out of state members, who are members of their respective state medical associations and of the American

Medical Association, shall have their dues reduced to half of that of the regular members. Any member who shall fail to pay his annual dues by December 1st shall be held as suspended without action on the part of the Society.

Dr. R. S. Cathcart brought to the attention of the Society the deplorable condition in which the Society books are now being kept. He moved that the Chair appoint a committee of three to confer with the Librarian as to the best method of preserving the Society's Library, and to submit a report at the next meeting. The Chair appointed Dr. Edward Rutledge, Dr. R. S. Cathcart and Dr. W. A. Smith.

The Scientific Program was called at 9:00 P. M.

Dr. R. L. McCrady reported a series of cases of abdominal pregnancy. This was discussed by Dr. Rutledge.

Dr. J. D. Whaley reported a case of vesical calculus of the "soft stone" variety, and read a brief paper on this subject. This was discussed by Dr. J. J. Ravenel.

Dr. Bruce Mayne, now connected with the United States Public Health Service, was introduced by Dr. W. A. Smith. Dr. Mayne gave a brief talk on the treatment of paresis by malarial inoculation. He said that he had come to Charleston for the purpose of organizing a station for the breeding of mosquitoes for this purpose and establishing a clinic for the treatment of this type of disease, this to be under the direction of the United States Public Health Service.

The Chair then called upon Dr. William Prioleau to introduce the guest speakers of the evening. Dr. Prioleau in an appropriate manner introduced Dr. E. P. Alyea and Dr. A. R. Shands, both of Duke University.

Dr. Alyea, Professor of Urology, Duke University, the first speaker, gave an illuminating discussion of renal function tests, illustrating his address with lantern slides.

Dr. Shands, Professor of Orthopedics at Duke University, then addressed the Society, his subject being Synovial Fluid in Chronic Arthritis. He illustrated his excellent address with lantern slides.

There being no further business, the meeting adjourned.

W. A. Smith,
Secretary

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, MAY 26TH, 1931, AT 8:30 O'CLOCK

The meeting was called to order by the President, Dr. J. Sumter Rhame.

Present: Doctors: Banov; Beach; Bowers; Buist; Cain; Cannon; Chamberlain; de Saussure; Jackson; F. B. Johnson; Lynch; McCrady; Maguire; Martin; Mitchell; Mood; O'Driscoll; Rhame; W. M. Rhett; Rutledge; Sanders; W. A. Smith; W. H. Speissegger; Sughrue; Townsend; Waring; R. Wilson. (27)

Guests: Dr. A. J. Waring, of Savannah; Dr. Hillyer Rudisill of Roper Hospital.

The minutes of the meeting of May 14th were read and confirmed.

Under Reports of Officers and Committees, Dr. O. B. Chamberlain, secretary of the delegation to the State Medical Association, submitted a brief report on the meeting of the Association held at Greenville on May 5th, 6th and 7th. The following were the main points: Dr. Joseph Young, of Anderson, was elected President-Elect and Dr. E. A. Hines reelected Secretary and Treasurer. Dr. J. H. Cannon was reelected Councilor of the First District. The Scientific Session was well attended and the programs were of a high class. On the second day clinics were held at the Shriners' Hospital, the City Hospital, at the Brockman Clinic at Greer, S. C., and at some of the private hospitals. Columbia was selected for the 1932 convention.

Dr. W. C. O'Driscoll reported that the special committee appointed to confer with the Librarian in regard to the library had not had a meeting, but would do so before the next meeting of the Society and be ready at that time to make a report.

Under Miscellaneous Business, the matter of the amendment to the By-Laws, which had been submitted at a previous meeting and a copy of same sent by mail to all members, was brought up for consideration. This amendment was to change Chapter V, Section 2 of the By-Laws to read as follows:

The annual dues shall be Fifteen Dollars (\$15.00). Ten Dollars (\$10.00) shall be payable in advance on January 1st of each year, and Five Dollars (\$5.00) payable on October 1st. Out of state members who are members of their respective state medical associations and the American Medical Association shall have their fees reduced to half of that of the regular members. Any member who shall fail to pay his annual dues by December 1st shall be held as suspended without action on the part of the Society.

It was moved, seconded and carried that this amendment be adopted.

The Scientific Session was called at 9:00 P. M.

Dr. W. M. Rhett reported a case of multiple neuritis in a child of six years, probably due to lead poisoning. This was discussed by Dr. A. J. Waring, Dr. Beach and Dr. Townsend.

Dr. M. W. Beach reported a case of acute pericarditis and endocarditis in a child of about nine years.

The President then called upon Dr. Beach to introduce the guest speaker of the evening, Dr. A. J. Waring, of Savannah. Dr. Beach in an appropriate manner presented the visiting Doctor.

Dr. Waring expressed pleasure at having been invited to address the Society and hoped that the Medical Society of Georgia and the Medical Society of South Carolina might establish more frequent contacts. He then proceeded to read a most delightful address on "The Problem of the Pre-School Child."

At the conclusion of this address, the meeting adjourned.

W. A. Smith
Secretary.

COLUMBIA MEDICAL SOCIETY

Medical Society Hall March 11, 1931. Regular scientific meeting called to order by the president Dr. James S. Fouche, at 8:30 P. M.

Minutes of last regular meeting read and adopted. No clinical reports.

Dr. William Weston, Sr., introduced the guests of the evening. Dr. A. R. Shands and Dr. E. P. Alyea, both of Duke University, Durham, N. C.

The first address of the evening was by Dr. A. R. Shands, professor of orthopedics, on Synovial Fluid in Chronic Arthritis with a Few Remarks on the Orthopedic Care of Arthritis. His paper was illustrated with lantern slides. He emphasized the exercise in chronic arthritis and pleaded for more and further examination of the synovial fluid in arthritic cases. Discussed by Dr. William Boyd and Dr. A. T. Moore of Columbia. Closed by Dr. Shands.

The second paper was that by Dr. E. P. Alyea, professor of urology on Renal Functional Tests with Illustration with Lantern Slides. Dr. Alyea reviewed the history and spoke of the two methods of obtaining functional tests, that is first, retention tests by examination of chemical substances in the circulation and second, excretion tests. The phenol sulphophthalein is the most reliable one now used. His paper was illustrated with lantern slides of graphic chart emphasizing particularly the output of phthalein in the first 15 and 30 minutes. His paper was discussed by Dr. Wilton Weinburg of Sumter, Dr. W. R. Barron, Dr. Lawrence Thaxton of Orangeburg, Dr. Hugh Wyman, Dr. J. M. Davis, Dr. Marion Wyman and Dr. L. E. Madden. Discussion was closed by Dr. Alyea saying that the intravenous method was the one he used in the phthalein test. Both papers were well received.

Dr. Jenkins Mikell showed some moving pictures of eye work particularly the removal of cataracts.

Dr. Charles L. Mobley, president of the South Carolina Medical Association made a few remarks to the society and was especially glad the meeting in 1932 would be in Columbia.

There were about 15 visitors present, some of whom were as follows: Dr. Charles Mobley, and Dr. Lawrence Thaxton of Orangeburg; Dr. Milton Weinburg, Dr. Lemon and Dr. Baxter from Sumter; Dr. Price Timmerman from Batesburg; Dr. Frontis from Ridge Spring; Dr. Crosson, Leesville; Dr. DuBose of Bishopville; Dr. Gibson, Dr. Scurry and Dr. Crosby of Greenwood and Dr. Davis of the Columbia Hospital. 55 members present.

Dr. Benjamin Rubinowitz was elected a member of the Columbia Medical Society.

Society adjourned at 10:45 P. M.

Respectfully submitted,

William Weston, Jr.
Secretary.

COLUMBIA MEDICAL SOCIETY

Columbia Medical Society, Columbia, S. C., Medical Society Hall, Monday, May 28, 1931.

Second regular meeting of month called to order by the president Dr. James S. Fouche at 8:50 P. M.

Minutes of last regular meeting read and adopted.

The chairman of the library committee Dr. Allison requested that Dr. E. W. Barron read the resolutions they had drawn up and approved to be presented to the members of the medical society for adoption. These were read. The resolutions were moved and seconded to be adopted. Discussed by several members. Motion passed.

Dr. Harmon as chairman of the investigating committee of the group insurance for mal-practice reported favorably but requested more time to confer with the Attorney General of South Carolina. This request was granted.

Dr. Dotterer read the resolutions regarding the death of Dr. Benjamin H. Baggott. The secretary gave a rising vote of approval to the committee and respect to Dr. Baggott.

Dr. Fouche stated that he had received a letter from Dr. L. B. Owens congratulating the society on obtaining the South Carolina Medical Association annual meeting in Columbia in 1932. He suggested a committee from the society be appointed to work out plans for the biggest and best meeting yet held by this association.

Motion by Dr. Allison that a committee of three be appointed by the president to prepare for plans for meeting in 1932. The President appointed the following: Dr. Marion Wyman, chairman, Dr. F. M. Routh and Dr. Frank Owens.

Dr. Emmett Madden presented the case in the clinical pathological conference as probably acute cholecystitis with gall stones. Discussed by Dr. Harmon, Dr. Hugh Wyman and Dr. Marion Wyman. Dr. Bunch stated that on operation the pancreas appeared to have a malignant growth in the head of the pancreas. Dr. Plowden closed the discussion showing the organ as an acute and chronic pancreatitis.

Dr. Plowden urged the members of the society as to the importance of getting autopsies and asked that they further their efforts in so doing.

There were 32 members present. Society adjourned at 9:45 P. M.

Respectfully submitted,
William Weston, Jr.
Secretary.

Resolutions:

BENJAMIN H. BAGGOTT, M. D.

BE IT RESOLVED: By the Columbia Medical Society, that by the death of Dr. Baggott, the Society has lost one of its most valued members.

Dr. Baggott was a man of exceptional character, an example of a Christian gentleman and a leader in the Medical profession. He was a skilled surgeon and displayed unusually good surgical judgment in his work.

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Dr. Baggott was popular not only with doctors, nurses, and patients but with whom he came in contact. They felt the power of a personality far above the average, and admired and loved him.

He won the confidence of his patients, not only through his ability as a surgeon, but also on account of his keen and human insight into their troubles.

The City of Columbia, the Columbia Medical Society, the State at large, and the profession as a whole have lost a man who will be long remembered as a leader of men.

BE IT FURTHER RESOLVED: That a copy of these resolutions be spread upon the minutes of the Columbia Medical Society;

And that copies be sent to his family; the local press, and to the South Carolina Medical Journal.

COMMITTEE:

Henry W. Rice, M. D.

L. Emmett Madden, M. D.

Thomas D. Dotterer, M. D.

25 May, 1951.
Columbia, S. C.

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The Journal

of the

South Carolina Medical Association

VOL. XXVII.

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NO. 7

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SOCIETY REPORTS

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The Journal

OF THE

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Published Monthly Under Direction of the Board of Councilors.—Annual Subscription, \$3.00.

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Col. J. E. Daniel, Med. Res. Greenville, S. C.

PUBLIC HEALTH

B. F. Wyman, M.D., Columbia, S. C.

EDITORIAL

OBSERVATIONS OF A. M. A. MEETING

Ordinarily the medical man is not so much concerned with the actual number of people attending a convention as he is with the scientific aspect of the meeting. It must be acknowledged, however, that there is a peculiar inspiration coming from contact with seven thousand doctors at one time. There were probably eight or nine thousand people at the A. M. A. Convention in Philadelphia. It was in all of its phases an epochal event. The setting could not have been more conducive from a sentimental standpoint for a great occasion. There the first medical school was established and more "first things" connected with the history of our great country than almost any other place can boast of. It must be conceded that the impress of Philadelphia on the history of medicine in this country is second to none. Long prior to the Civil War the medical schools of Philadelphia had a peculiar lure for the best type of student from the South. This at-

traction has been very well sustained notwithstanding the hundreds of other medical schools that have lived and died since those early days. We have always maintained that a sufficiently interesting program will secure a good attendance at medical meetings whether it be district, county, state or national. This was so at Philadelphia. The great new auditorium was in itself a most satisfying feature. The A. M. A. was the first convention to hold a meeting there. The scientific exhibits have never been equalled perhaps anywhere in the world and the commercial exhibits no less so. The House of Delegates had before it voluminous reports from many sources. Perhaps the most significant was that of the Board of Trustees. The Board has under consideration the erection of a new headquarters building before many years pass. The present headquarters with its five hundred employees and vast printing business together with the extensive work of the various Councils is over taxed. The A. M. A. now numbers one hundred

thousand members and it is fitting that the largest medical organization in the world should have ample space for further expansion of its activities. The remarks of the President Elect, Dr. Judd, well known to many of our South Carolina surgeons, had to do with a matter we have often stressed in the Journal, that is, making of our society meetings to a considerable extent clinical programs. Dr. Judd suggested that the A. M. A. take an active hand in promoting this type of program in the various constituent societies. If carried out such a concerted effort should prove of inestimable benefit to every locality in the United States. This is a practical point, that Dr. E. C. Cary, of Dallas, Texas, the President Elect will be surely interested in. The South has come in for extraordinary honors by the A. M. A. in recent years. Dr. Cary is an executive of unusual ability. He is well known in scientific circles and to organized medicine in the South, especially through the Southern Medical Association, Dr. Cary has been a tower of strength. His long service on the Board of Trustees of the A. M. A. will give him a peculiar advantage as President Elect and President. We are confident that Dr. Cary will do everything in his power to bring the vast benefits of organized medicine within reach of the many thousands of practitioners in the smaller localities of this country as well as stimulate such matters in the larger centers.

The legislative enactments of the House of Delegates this year were wide in scope and comprehensive in thought. One of the major problems was that of the relationship of the activities of the Veterans' Bureau to the disabilities of ex-service men which has now become one of the most colossal medical problems of the ages. State committees will be appointed to cooperate with American Legion Posts in an effort to bring about a modification of the present laws with reference to the policy of rendering medical and hospital benefits to veterans with non-service connected disabilities.

Many problems dealing with the costs of medical care, with specialism, with various

forms of hospitalization and the economic status of the profession were referred to the new bureau on medical economics.

The Woman's Auxiliary of the A. M. A. is now an important factor in the promotion of many public health measures and especially are they successful in popularizing the A.M.A. health Journal, Hygeia.

South Carolina was represented in the House of Delegates by Dr. J. H. Cannon of Charleston and Dr. E. A. Hines of Seneca. Dr. Cannon served on the Reference Committee on Public Health.

This was the year for reapportionment of delegates and the ratio was one delegate for each eight hundred members to stand for three years. South Carolina, therefore, retains two delegates having more than eight hundred members.

Among the members of our Association whose names appear on the scientific program were the following: Dr. Kenneth M. Lynch of Charleston, Drs. J. R. Allison and P. V. Mikell of Columbia, Dr. Robert B. Taft of Charleston, Dr. E. W. Carpenter of Greenville and Dr. William Weston of Columbia. The attendance from South Carolina was good. We noted the following as having registered: Drs. J. R. Allison, Columbia; J. H. Cannon, Charleston; J. D. Guess, Greenville; Roland Hammond, Providence; E. A. Hines, Seneca; T. R. Littlejohn, Sumter; K. M. Lynch, Charleston; H. H. Plowden, Columbia; G. P. Richards, Charleston; B. B. Steedly, Taylors; Milton Weinberg, Sumter; J. Warren White, Greenville; C. W. Bailey, Spartanburg; W. W. Boyd, Spartanburg; O. B. Chamberlain, Charleston; C. P. Corn, Greenville; L. Rosa H. Gantt, Spartanburg; B. K. McInnes, Charleston; Theodore M. Davis, Greenville; E. S. Valentine, Columbia; C. P. Vincent, Laurens; W. C. Abel, Columbia; W. T. Brockman, Greer; A. F. Burnside, Columbia; E. W. Carpenter, Greenville; J. R. Dunn, Sumter; J. W. Jervy, Greenville; L. E. Maden, Columbia; R. M. Politzer, Greenville; P. D. Hay, Jr., Florence; W. F. R. Phillips, Charleston; R. B. Taft, Charleston; Wm. Weston, Columbia.

SOUTH CAROLINA AGAIN TO THE FRONT IN THE STUDY OF PELLAGRA

We are pleased to publish herewith the first official report of Dr. Akin to the recent meeting of the Executive Committee of the State Board of Health. We are fortunate in having such an able physician as we all know Dr. Akin to be to assist us in our pellagra investigations. We bespeak the cordial support of every doctor in South Carolina in these studies.

TREASURY DEPARTMENT UNITED STATES PUBLIC HEALTH SERVICE

Columbia, S. C.
June 15, 1931

Dr. James A. Hayne
Secretary and State Health Officer
Columbia, S. C.
Dear Dr. Hayne:

Please accept this as a preliminary report of my activities since coming to South Carolina on April 11, 1931 for the purpose of cooperating with the South Carolina State Board of Health in making a field study of pellagra.

On May 6, 1931 I presented a tentative outline of our proposed program at a meeting of the South Carolina Public Health Association at Greenville, S. C. At that time I stated that for the purpose of our study we would adopt no hard and fast conception as to the etiology of the disease and that we would be guided largely by the beliefs and experiences of the physicians and public health workers of this State in selecting both etiological and therapeutic factors for study.

Whether or not pellagra is specifically a deficiency disease resulting from a diet which lacks a certain vitamin or a more complex combination of organic or inorganic elements as has been suggested by certain authorities, or whether the condition is due to ingestion of certain food substances which are of themselves toxic because of moulds or other contamination will be studied and our studies will not be based on preconceived ideas or directed along prejudiced lines. The Public Health Service has taken the position that pellagra is a diet deficiency disease just as is beri beri. If we undertake to support this hypothesis on the one hand or work only to disapprove it on the other, we fail to accomplish the real purpose of the study which is to develop and demonstrate the efficacy of a simple program for the control of pellagra under conditions as they actually exist in rural sections where financial conditions are more or less stringent at all times. In this work we must learn to use local machinery, or be prepared to develop local machinery without the expenditure of a great deal of money. Apparently the population group which suffers most from pellagra is least able to spend money for its control. If we are to benefit this population group it must be accomplished through the perfection of measures which are easily

and generally applicable, and which do not require complicated organizations nor liberal financing for their prosecution.

Since inaugurating our program in South Carolina I have visited Charleston, Darlington, Florence and Chesterfield Counties. In the first three there are whole-time County Health Departments. In Chesterfield County there is no whole-time health department but the American Red Cross is making a special drive for pellagra control, using a whole-time nurse. In each of these Counties I have seen typical cases of pellagra distributed among persons ranging in age from 18 months to 75 years. I have consulted physicians in each county and have solicited their opinions as to the cause, prevention and cure of the condition. While there seems to be some difference of opinion or perhaps I had better say a frank agnosticism regarding the cause of pellagra, it is the general consensus of opinion among the physicians to whom I have talked that the prevention and cure of pellagra is strictly a matter of diet.

It is my purpose to visit all counties in South Carolina wherein a whole-time health organization is now operating and I hope that it will be possible for you to continue to accompany me on these visits as you have been doing, as your presence serves to identify our study with the general health program of the South Carolina State Board of Health and insures full-hearted cooperation of the local physicians and local authorities.

As a result of this rapidly undertaken county survey I expect to select, subject to the approval of the State Board of Health, two counties in east central South Carolina and west central South Carolina where an intensive study of pellagra will be undertaken. House to house surveys will be made through which approximately all cases of pellagra will be located. Full information regarding each case will be secured, and effort being made to identify all factors which might contribute to the cause of the disease in each case. This work will be done in close cooperation with the practising physicians of each county, and no measures will be taken with reference to any case without the approval of the County Medical Association. Once we have established a factor or set of factors which appear to operate constantly in producing the condition we shall attempt through the cooperation of physicians, county health organizations, home demonstration departments and local welfare organizations, where these exist, to build up pellagra control movement which can be operated successfully not only in the counties selected for intensive study, but in any county. The Public Health Service hopes that through their work in South Carolina a course of procedure for controlling pellagra in rural areas will be worked out which can be recommended to any State where this disease is a major problem.

I am assured of the cooperation of Laboratory of the South Carolina Food Research Commission in studying the pellagra preventive-value of the commonly available foods which are or may be grown in the various sections of the State. This Laboratory will supplement the work already being done along this line by the

Public Health Service in the Laboratories of the National Institute of Health.

The problems with which we are faced in undertaking to develop pellagra control measures on a county-wide or State-wide basis are numerous and exceedingly complicated but I do not believe that they are insoluble. If economic stress, the deficient diet and improper diet which result from poor dietary habits are the preeminent factors in causing pellagra our studies should show either that these factors can be modified or that they cannot be changed to a sufficient degree to materially affect a rural population. In either event we will be afforded a greater degree of certainty than we now possess as far as our knowledge of pellagra goes. If pellagra is a diet deficiency disease and if it may be prevented or cured by the regular consumption of such items of food as are suggested by those who sponsor the diet deficiency hypothesis, there seems to be no real reason why the people of this State may not rid themselves of a condition which annually affects some 20,000 to 30,000 persons, and annually kills several hundred. It is certain that the soil of South Carolina will grow every food which has been suggested as of value in preventing and curing pellagra. The real difficulty, therefore, will be in getting the people, who are the most apt to be affected by pellagra, to raise and to eat the foods which are rich in protective elements.

A special study will be made to determine within exact limits the value of dried brewers yeast in controlling pellagra. A biochemical analysis will be made of several yeast products now on the market to determine their relative efficacy. A group of pellagra patients selected by local physicians will be fed on the yeast shown to be best by this test. A careful check will be maintained to determine the exact amount of yeast taken by each case, and clinical progress of the case will be noted at brief intervals. Certain cases will be given yeast along with improved diet. One group will be given yeast along with regular diet, while still another group, watched for control purposes only, will be placed on improved diet, but will receive no yeast. It is hoped from this study to determine whether or not in the yeast we have a material with which the ordinary diet of people living in a pellagra section may be sufficiently fortified to minimize the danger of a restricted diet.

Occasion will also be taken to study the efficacy of the administration of yeast as is now practised in South Carolina. From the stand point of administrative efficiency one could scarcely suggest an improvement on the method now employed by the State Board of Health, but the question to be answered is whether or not the yeast as now distributed is actually producing the results which may be expected of it. From

my own observations I am certain that not all of the yeast actually purchased by pellagra sufferers is consumed by the case for which it is bought. As the product is not highly appetizing to a great many people, many pellagrains stop taking it before enough has been consumed to benefit the patient even if the yeast had a specific value. It is likewise true that a considerable amount of yeast is ordered by people who do not suffer from pellagra and the product is being taken for a variety of ailments.

It is expected that the remainder of this year will be spent in studying conditions and it is hoped that before next spring some simple procedure will be developed which can be generally applied and which if followed out will tend to control a disease which is costing South Carolina so much in money and human suffering.

Respectfully
C. V. Akin, Surgeon
U. S. Public Health Service

POST GRADUATE CLINICS AT STATE PARK FOR STUDY OF TUBERCULOSIS

We wish to again stress the information given in the last issue of the Journal as follows:

Attention has been called by Dr. G. T. Tyler, of Greenville, Chairman of the Committee, to the Post Graduate Clinics to be held at the South Carolina Sanatorium at State Park on July 29 and 30. The following physicians have been engaged to assist in holding these clinics: Dr. Paul Ringer, of Asheville, N. C., Dr. P. P. McCain, Superintendent of the North Carolina State Sanatorium; and Dr. J. B. Sidbury, an eminent pediatrician of Wilmington, N. C. In 1930 there was a large attendance of physicians and it is expected that this number will be greatly augmented this year.

The excellent program given herewith is a pioneer effort worthy of more than passing notice. Every doctor who expects to attend these clinics is urgently requested to notify Dr. Ernest Cooper, Director, South Carolina Sanatorium, State Park, S. C., so that he may know how many to prepare lunch for.

ORIGINAL ARTICLES

*THE NAVY MEDICAL DEPARTMENT

*Address of Admiral C. E. Riggs, Surgeon
General U. S. Navy, Washington, D. C.*

Gentlemen of the South Carolina Medical Society:

Last year when I was invited to attend the celebration of the 250th Anniversary of the founding of the City of Charleston, the thought occurred to me that Charleston has been a very civilized and progressive community practically since the beginning of civilization on this continent. I regret that I was unable to be present at last year's celebration and I assure you that I accepted your invitation to appear before the Charleston Medical Society with much gratification and pleasure.

I dare say your Medical Society is almost as old as the City of Charleston, and consequently very rich in traditions, with a venerable and highly meritorious record of achievements in the various fields of medical endeavor. During the present century, the noteworthy industrial growth in the Carolinas has brought along with its financial help such great advances in the educational opportunities and in the cultural and professional spheres that the time has long since passed when we could think of this section principally in terms of cotton and tobacco and pellagra. And so, because of the glorious history that lies behind your Society and because of the present and past fine standing of the South Carolina profession in American medicine, I sense the high honor of being here tonight as your guest and speaker.

I do not speak lightly of your traditions and your standing, for the record of medicine in South Carolina is notable enough to bring pride to any State that could boast of the sort of persons and events that fill your medical annals. I am thinking of the pre-revolutionary days when there were no medical schools in this country (except the embryonic institution

at the Philadelphia College, and at King's College, New York) and no thorough medical education could be obtained outside of Europe. When we remember that more medical students from South Carolina than from any of the other colonies were then attending the famous universities in London and Edinburgh, we can explain the high standing of the profession here in the earliest days—a standing that has been passed along through succeeding generations.

Let us just glance over a few other facts of your early history. The first epidemic of yellow fever described by an American physician was that which occurred in Charleston in 1748, and described by Dr. John Lining of this city. Your Dr. Alexander Garden was a distinguished classical scholar, mathematician and botanist as well as physician. Perhaps you know that your beautiful flower, the gardenia, was named for him by the great Linnaeus. Dr. William Bull, the first white person born in South Carolina, was a pupil of the great Boerhaave at Leyden, and for many years was Lieutenant Governor of South Carolina. Dr. David Ramsay, who practiced in Charleston, was very prominent as a surgeon in the Revolution, and later as a legislator, serving as president of Congress during John Hancock's absence in 1785. You should read his "History of the Revolution in South Carolina" and his famous "History of the American Revolution."

With the profession containing this type of men it is not surprising that South Carolina established one of the very earliest medical schools in this country. The Charleston Medical Society was largely instrumental in that establishment, even undertaking to finance and conduct the school at its beginning in 1824. A long list of distinguished names has graced the faculty roll of that school. It included Louis Agassiz in 1851. The school of course fell on lean years during the unpleasantness of the 1860's, which, I have observed, is still a frequent topic of conversation in these parts. There is little doubt as to

*Read before the Medical Society of South Carolina, Charleston, S. C., March, 24, 1931.

the sentiment of the school faculty in 1861—they left in a body and joined the confederate cause. Of course you are all familiar with the eminent success of the school since it was taken over by the State in 1913.

I belong to a medical organization which also, I am proud to say, is known for its fine traditions and its achievements in the general and medical history of this country, and for its present high professional standards. This organization, the Navy Medical Department, because of the wide scientific and geographic range of its activities, occupies a quite unique position among medical institutions. As you are probably unaware of the present scope of our work, I would like to give you this evening something of a bird's-eye view of it.

The Navy Medical Department is made up of about 6,000 persons, who compose its four divisions—the medical corps, dental corps, nurse corps and hospital corps. The essential mission of this department is to provide a high type of medical service for the Navy and Marine Corps personnel; to reduce the incidence of disease and injuries; to maintain proper sanitary conditions at naval shore establishments, among the forces afloat, and with Marine Corps expeditionary forces; to maintain the required standards of physical fitness for entrance upon or retention in the various naval duties; through its supply system and reserve organization, to be prepared for any national emergency; and to provide a sanitary service and medical care for the native populations of certain of our island possessions and for other countries where treaty agreements include such service.

In order to carry out such a mission, the Medical Department must be spread out pretty well over the world, operating twenty major hospitals in our coast cities, at Great Lakes, and in the islands, and the hospital ship, *U. S. S. Relief* (a veritable floating hospital which accompanies the fleet). But the naval hospitals comprise a mere fraction of the program. We must conduct a school of naval medicine at Washington and a school for the hospital corps on each coast; a supply depot on each coast and in the Philippines; we must maintain personnel and equipment for recruiting at offices in 38 cities of the United States; and a medical organization

for each naval station, naval vessel, and Marine Corps expeditionary force.

While preventive medicine occupies the place of first importance in naval medicine, the province of tropical medicine is one with which the Navy has always been deeply concerned. To give you an idea of the extent of the tropical belt in which we conduct hospitals and dispensaries and provide sanitary service, I may say that this extends westward from the Virgin Islands just half way around the globe to the China coast. It also extends from 15 degrees latitude south to 20 degrees latitude north, taking in, in addition to our establishments in the Virgin Islands and China, those in Porto Rico, Haiti, Cuba, Nicaragua, Panama, Hawaiian Islands, Guam, the Philippines, and Samoa.

We are interested in altitudes as well as latitudes and longitudes, and in altitudes from many thousand feet above sea level where our planes fly, to the ocean depths (sometimes as much as 300 feet below the surface) where our submarines and our deep sea divers go.

The business of high flying and deep diving of course brings us into very special and unusual environments with their particular hazards and thus their particular medical aspects, so we are obliged to be continually engaged in research work in these fields and in the application of now well established principles to cope with these hazards.

The signal success which the Navy has experienced in its efforts to reduce the rate of aviation accidents is due in no small part to the work of medical officers engaged in the newly introduced specialty of aviation medicine. Naval aviation fatalities have declined from seven deaths per 10,000 hours of flight in 1924 to one death per 10,000 hours of flight in 1930 despite such factors of hazard as student training, stunt flying, combat maneuvers, formation flying, and the landing on decks of ships.

Few persons outside of those who are intimately associated with aviation appreciate what an important role aviation medicine plays in the safety of aviation today. It has made great strides of progress since its inception and since the recognition of its value about 15 years ago. This de-

velopment of course received a great stimulus through the enormous extension of aviation during the World War. If the war brought no other benefits, it did supply the then much needed impetus to aviation development, and this development was accomplished not only by the improvement of aircraft, but by teaching thousands of young men to fly and by showing us what sort of physical and mental attributes a person must possess in order to become a successful pilot—and more important—to remain a safe pilot.

When Veranzio made his memorable parachute jump from a tower in Venice more than 300 years ago it wouldn't have mattered if he had been deaf and blind and suffering from advanced arterio sclerosis; that historical trip through the air would have been just as successful, and that primitive parachute would have acted in the same way, even if Veranzio had been unconscious. The same can be said about another historical flight that occurred a hundred and fifty years later (in 1785) when a captive balloon flew across the English Channel with Blanchard and the American, Dr. Jeffries, sitting in the basket and wondering what would happen next and knowing that whatever did happen, they wouldn't be able to do anything about it.

But after another century had passed and the Wright brothers had performed their daring and brilliant glider experiments just a little north of here at Kitty Hawk N.C.(1900) it became increasingly essential as we attained greater speed and greater altitudes and had to perform more complicated maneuvers, that pilots should be endowed with certain physical and mental qualifications. And a variety of other medical aspects of aviation, quite outside this question of pilot qualifications, has entered the general subject, each having to do with the effort to bring greater safety to flying and greater proficiency to pilots.

You can realize the size and importance of the task in the Navy when I tell you that the Navy now has about a thousand pilots under flying orders and is training about 300 new student pilots every year. The training of a pilot is an expensive business, costing, in the Navy, about \$30,000 for each student. It is especially expensive when you consider that even after the most careful and painstaking

methods are employed in selecting the most promising candidates for flight instruction, only about half of them are able to achieve sufficient skill to be placed under flight orders.

We now have 48 medical officers who are qualified experts in aviation medicine, and 35 of these are qualified pilots themselves and are serving under flight orders. Last year we completed 5,000 examinations on flight personnel and flight candidates. These examinations are of the most searching type, and each one requires about two hours for completion. The aviation medicine people are interested in such problems as the mechanism of depth perception, visual acuity, eye muscle imbalances, the significance of moderate degrees of heterophoria, the maintenance of equilibrium, auditory fatigue under flying conditions and its bearing on radio reception, aviation hygiene, the effect of moderate cardiovascular disturbances on one's adaptability for pilot work, the dangers of carbon monoxide poisoning from motor exhaust in certain types of planes, the possibility of reducing the percentage of failures among student pilots by the selection of candidates on the basis of personality studies. Within the last three years the medical officers who have collected extensive psychological data on 600 student pilots at Pensacola have demonstrated that the percentage of failures can be reduced by half and that the crash rate can be materially reduced if candidates are selected on a psychological as well as physical basis.

I wish you could see one of the airplane carriers, the *Saratoga* or the *Lexington*, in operation, or I should have said "in action" because "action" is just what you see. These ships cost some 45 million dollars apiece and each carries 75 planes. You should see the planes leaving those ships at the rate of 10 seconds for each take-off and joining the soaring and roaring squadrons in all manner of difficult maneuvers and later alighting one by one in a perfectly orderly and prearranged fashion with rarely if ever a single hitch in the whole performance. Then you will realize that to make such a feat possible, every one of the pilots as well as the planes must be perfect specimens and must be kept in a condition that is little short of perfection.

Now, to descend to an activity where much

lower altitudes are involved, but where perhaps equal hazards exist and problems of physiology are equally at play, I want to say a brief word on the medical aspects of submarine life and deep diving activities.

For many years we have been interested in improving the ventilation and other living conditions in submarines, and in recent years we have been intimately associated with the work which has resulted in the perfection of a device that is used in escaping from disabled submarines. The crews of all submarines are now trained in the use of this device which is known as the "lung." The entire development of the device followed the application of the very exacting laws of physiology and the whole technique which must be followed so meticulously in ascending to the surface likewise involves physiological laws, so you can see the necessity of having always on hand at the scenes of submarine and diving operations and in our research laboratories, medical officers who are well versed in physiology.

For the more strictly clinical and sanitary work we must have large numbers of highly trained specialists in every branch of the science of medicine. This means that we must carry on a continuous program of post-graduate training—a program which obliges us to send every year more than a hundred officers to courses of instruction in our own school and hospitals and in the leading universities and medical centers of this country.

We are now viewing with increasing concern the problem of cancer. As you know, cancer has jumped from 6th position as a cause of death in 1900 to 2nd place in 1927, and is now responsible for about 10% of the deaths in the United States. Formerly we only saw an occasional case of malignancy in the service because of our age group but now we are concerned with the Veterans' Bureau beneficiaries of whom there are some five million, the greater part of them just now entering the cancer age.

The proper handling of a group of about 500 cases of malignancy—our present estimated number—even if not hospitalized, is a problem of no small magnitude. The expected mortality from cancer among the Veterans will be about 12,000 per year in the period

1950 to 1960. Most of the load will be shouldered by the Veterans' Bureau and its institutions, but it is probable that the Navy and Army hospitals will continue to carry their share.

A properly coordinated and directed medical organization makes for a larger volume of production and a lower cost of production—in other words, it makes for efficiency and economy. I believe the Navy Medical program well illustrates this point. Last year we had about two million sick days in our hospitals (including about one million for Veterans' Bureau patients) and we were able to supply everything that a modern hospital furnishes (including excellent food) at less than three dollars a day per patient. Quite aside from our hospitalization program we were able to turn out an astonishing volume of other work, some items of which, such as physical and other examinations run into figures of the hundred thousands. For Navy personnel we used last year 75,000 injections of the arsphenamines, and in Haiti, where we supervise the native hospitals and clinics we used more than a half million injections of the arsphenamines and bismuth.

As for accomplishments that count, I could quote statistics at great length, Navy statistics, which, by the way, are unsurpassed for their accuracy, and which would reveal in a striking way that public health is a commodity that can be purchased anywhere, and in almost any quantity; an investment, we may say, that pays the finest kind of dividends. Just to mention one item of these public health accomplishments; the Navy death rate has been dropping steadily since 1900 and now stands at one-third of the level it held 30 years ago. Last year it was 3.36 per thousand, which is approximately one-third of the rate for males of the wage earning age in the civilian population at large in the United States, and this in spite of the fact that in the Navy the deaths from accidents exceed those from disease; also despite the extra disease hazards to which one is exposed in a naval career.

It has been said many times and by many persons that engaging in medical work on a salary basis is destructive of initiative and interest and of one's scientific and professional

zeal. There may be *some* truth in such a statement, but I'm not so sure that there is really *any* truth in it. All I can say is that in judging the matter from our experience in the Navy, there is no truth in it at all. In fact, if there is one change more than any other that has come into the Navy medical service during the past decade or two, it has been the remarkable elevation of the professional standards of the medical corps, and this has been in spite of, certainly not because of, the fact that the pay scale has remained the same during this long period.

This all goes to prove that the great majority of people who go into medicine as a life career seek that career primarily with such laudable motives as their desire to serve mankind and to advance our scientific knowledge—not as, certain journalists would have the public believe, with the chief aim of material gain.

It is extremely fortunate that the spirit of medical endeavor does exist in such abundance in the heart of the profession. Otherwise all the expensive equipment and the large staff of workers, such as we have in the Navy, would be practically worthless. For after all, the most valuable factor in all medical endeavor is this intangible one that is so difficult to describe and yet one that makes its existence felt so forcibly.

In closing I want to say just a word about the Charleston naval hospital. Although it is one of our smallest hospitals it is nevertheless one that we have a fondness for; it may be the *small* child in our large family of hospitals, but it is by no means a *foster* child.

One of your Senators was complaining, in the last session of Congress, about there being no large naval hospital from Norfolk south on this coast. Congressman McMillan was very anxious to get a liberal appropriation which would be used to replace the temporary buildings here with a more suitable and desirable permanent structure. He has introduced a bill for this purpose. If he succeeds with his measure in one of the coming sessions, certainly no one will be more pleased over it than I.

*PATHOLOGY AND TREATMENT OF THE DISEASED CERVIX

By Dr. A. E. Baker, Jr., Charleston, S. C.

There is probably no gynaecological condition that the doctor in all types of practice is more frequently called upon to treat than the diseased cervix, and the frequent unsatisfactory results of his treatment are largely due to the fact that the treatment is directed at the manifestation of the disease, rather than at the pathology.

The normal cervix is a fibro-muscular organ which protrudes from the fundus of the uterus into the vagina. The vaginal portion is covered by stratified squamous epithelium, which differs from the skin only in that there are no sebaceous glands, sweat glands, or hair follicles.

The cervical canal, about an inch in length, is lined by a single layer of tall columnar epithelial cells, with nucleus at the base. The columnar cells terminate very abruptly at the external os where the squamous epithelium begins, and at the internal os where begins the endometrium. There is no submucosa, the columnar cells being placed directly upon the muscle tissue, which together with connective tissue and numerous large racemose glands, form the body of the cervix. These glands secrete an alkaline mucous into the cervical canal.

The pathological findings in endocervicitis are brought about in several ways, the most common of which is the cervical laceration following child birth; however, lacerations or childbirth, are not necessary factors, as the condition is sometimes seen in the virgin.

The infecting organisms are Staphylococci, Streptococci, B. Coli, and the gonococci. As a result of the infection there are the usual inflammatory changes including considerable edema and an excessive glandular secretion of a mucopurulent character, known as leucorrhea.

The fact should be stressed that leucorrhea is not a sign of uterine or vaginal infection, but purely a disease of the cervical glands in almost every case.

*Read before the South Carolina Medical Association, Greenville, S. C., May 7, 1931.

Because of the irritating discharges, a piece of squamous epithelium, at the external os, becomes separated and is cast off in the discharge. This leaves a raw surface either partially or completely around the external os. The columnar epithelium in the cervical canal is more resistant to this irritating discharge, and is stimulated to grow out to cover this newly made raw area, carrying with it, some of the racemose glands.

This newly covered area, with columnar epithelial cells from the cervical canal, gives the red raspberry appearance, and is commonly known as an erosion, and is nature's first effort to heal the raw surface. When there is a laceration, an eversion of the endo-cervical mucosa takes place. This eversion with the usual erosion, is known as an ectropion.

In the course of time the squamous epithelium which was replaced by columnar epithelium, makes an attempt to re-establish itself and grows inward under the layer of columnar cells, and again covers its original area but by so doing the openings of numerous glands are covered and blocked, either by actual squamous epithelial cells, or by fibrosis.

These glands whose ducts are blocked, continue to secrete. In this way, many cystic spaces are formed in the body of the cervix, known as Nabothian Cysts.

In some cases the squamous epithelial cells grow down into the glands instead of occluding them, which often results in a malignancy. With the pathology in mind, I wish to advocate a treatment which has given unusually good results in a recent series of cases.

Of the three outstanding methods of treatment, the Sturmdorf operation, radium, and the actual cautery, I prefer the latter and will confine my remarks to the cautery. The use of this instrument will not give satisfactory results unless it is handled in the proper manner.

I have divided this series of cases into three groups based upon the degree of pathology. Into the first group is placed those cases of recent cervical infection, with or without laceration. Cases not due to childbirth, will also be found in this group. There is some cervical enlargement, usually an erosion and slight discharge. The cervix is dilated. A

small narrow blade cautery point is used. The red raspberry erosion at the external os is burnt with the flat surface of the cautery. The cervical canal is then striped with the narrow cautery edge from near the internal os out to the lips. The strippings are 1 CM apart and not allowed to sink deep into the body of the cervix. Striping is necessary, inasmuch as, if the entire circumference of the canal is burnt, re-epithelialization cannot take place and atresia usually is the result.

I have had several cases of post-operative atresia. For this reason, a pencil shaped cautery should never be used. After cauterization, any lacerations should be repaired and a piece of iodine gauze packing left in the canal for twenty-four hours. In about four weeks the eroded surface will be cured, the size of the cervix will have contracted to normal, free from infection and therefore free from discharges.

The second group comprises those cases in which the cervical glands are markedly infected, indicated by a profuse leucorrheal discharge of a muco-purulent character. These glands must be reached and destroyed, to obtain a cure. Superficial striping of the cervical canal with the narrow cautery is not sufficient in these cases.

The cautery blade, while striping, must sink deep into the cervical tissue with each stripe, in order to destroy the glands from which the discharge is coming. Again be certain to leave strips of epithelium in the canal. So often we only apply the cautery to the surface of the canal, and not down into the glands. If the glands are not destroyed, the infection remains, and if Squamous epithelium has grown down into some of the glands, we have done nothing to prevent them from becoming malignant.

The third group is the one of most interest to me, inasmuch as the type of cautery treatment now being used gives results that were not obtained by striping.

The cervix of this group is the large, cystic, infected, possibly lacerated or ragged cervix of long standing. The type one would be inclined to amputate.

For these cervixes we resort to what might be termed the cautery punch. The cervix is not dilated as in the other two groups, and

the cautery is not applied to the cervical canal, but is inserted into mid-portion of the cervix at the external os, parallel to the canal for three-fourths of an inch. It is withdrawn and three or four more like insertions made, thus the body of the cervix containing infected glands and Nabothian Cysts, is thoroughly burnt.

Repair of lacerations here is unnecessary, for as the result of this treatment, we obtain almost a complete atrophy of the whole cervix in six to eight weeks.

In time the cervix becomes a mass of scar tissue, with a patent canal. As this type of cervix is usually found in middle-aged women, who will not again become pregnant, the final result is ideal.

When one considers the pathology of endocervicitis, he can well see what the treatment must accomplish to assure good and permanent results, and how foolish it is to expect a cure from such therapy as local medicinal applications to the cervix, or by vaginal douche.

(Lantern Slides)

DISCUSSION

Dr. Douglas Jennings, Bennettsville:

I think Dr. Baker is to be greatly thanked for bringing to our attention a simple, satisfactory treatment for a condition from which it is said eighty per cent of women are suffering. He well describes the pathology and the treatment which he advocates is rationally directed toward the correction of this pathology.

For several years I have been treating simple cervicitis by striping with the actual cautery, and since talking with Dr. Baker several months ago I have treated two cases by plunging the cautery into the cervix parallel to the canal, with good results. I have adopted this plan in dealing with the infected cervix; for the simple, uncomplicated cervicitis, where no other pelvic pathology exists, striping with the actual cautery, under no anesthesia; where there is other pathology, or where the development of nabothian cysts accompanies the cervicitis, I am using Dr. Baker's method of plunging the cautery into the cervix. But I still believe that where other pelvic pathology accompanies cervicitis, which must be corrected under anesthesia (for instance, metritis, endocervicitis, oophoritis, or salpingo-oophoritis), the best method of correcting that is by the Sturmdorf operation under anesthesia.

I again want to thank Dr. Baker for presenting this paper.

Dr. A. F. Burnside, Columbia:

A goodly percentage of these patients can be cured with the cautery; a percentage of them have to return and have a second or maybe a third procedure done. It has been our practice, where other pelvic pathology exists, to do a complete hysterectomy, not do just a subtotal hysterectomy and leave the cervix in. We know the cervix is the part of the uterus that causes or is the seat of most of the uterine disease, and I think if there is any other pathology in the pelvis a complete hysterectomy should be done, with complete excision of the cervix, with suturing of the uterosacral, round, and broad ligaments to the vaginal wall.

Dr. Baker, closing the discussion:

I appreciate the discussion of Dr. Jennings and Dr Burnside.

I have only one thing to say. This method of the cautery punch is not my method but is a method I saw in one of the western clinics.

I again thank the gentlemen for their discussion.

PUBLIC HEALTH

By B. F. WYMAN, M. D., Director of County Health Work, Columbia, S. C.

REPORT TO THE PUBLIC HEALTH COMMITTEE OF THE OCONEE COUNTY MEDICAL SOCIETY

Third Quarterly Narrative for Oconee County Health Department

Two crippled children were carried to Anderson to Doctor Boyd's clinic. Eleven visits were made to secure the cooperation of parents in the treatment of crippled children. Five applications were sent to the Shriners' Hospital, and two cases were given treatment there.

During the past school year 86 schools were visited in Oconee County, and 5,215 school children were examined.

Sputum was examined at the State Laboratory for a tuberculosis suspect.

Two specimens of blood were sent to the State Laboratory for analyses.

Seven specimens of water from rural wells and springs have been analyzed.

One hundred and sixty cases were vaccinated against smallpox.

Sixteen bags of Brewers' yeast were sold and one bag was given a patient who could not afford to pay for it (contributed by Mrs. N. Fant).

One hundred and twelve doses of anti-rabic serum were given.

1,515 leaflets and health booklets were distributed to the public.

2,479 anti-typhoid serum doses were given. Clinics were held by request in Newry, Seneca, Kenneth Mill, Monoghan Mill, Westminster, Walhalla, and a remote section of the mountains of Oconee County.

Twenty-three visits were made to cases of tuberculosis. Five applications were sent to State Park. Three were admitted.

Two bedside nursing demonstrations were given.

One hundred and forty-seven letters were written.

Fifty-four talks were made to school chil-

dren and lay groups.

Nine prenatal visits were made. Seven postnatal cases and seven infants were visited.

Four cases of hookworm were advised and treated.

Sixteen sanitary inspection visits were made.

Two visits were made to diabetic cases. Funds were secured for one case to purchase insulin which had been prescribed by the family physician.

Two 4-H Club girls were examined.

Two hare-lip cases were visited and pictures made of their deformity for the purpose of finding ways and means for them to have treatment.

Two mutes were visited to investigate their educational advantages.

Three conferences were held with negro midwives. Attendance 24.

A great many placards, health booklets, and samples of dental cream have been received.

Doctor Ben F. Wyman, Director of County Health Work in South Carolina, made a helpful visit to the Oconee County Health Department in May.

Several adult pupils have been found for the Opportunity School in Clemson College and Seneca Institute.

Miss Laura Blackburn, State Field Nurse, visited the Oconee County Health Unit and met the negro midwives in Walhalla, Seneca, and Westminster. Miss Blackburn gave a splendid talk at each of these places to the midwives with emphasis upon higher standards for these women to work by.

The meetings of the South Carolina Public Health Association, Oconee County Medical Society, and the Health Officers' Conferences were attended.

Social welfare work was done for the National Red Cross and several Associated Charities in other states.

Awards were secured for three half orphaned children, thru the Veterans Bureau.

Four pre-school and infant welfare clinics held. Seventy-four children were examined.

One hundred and fifteen homes were visited.

One hundred and nine telephone calls were made.

2,292 office visits were made.

One hundred and forty four miscellaneous visits were made.

Sixteen visits were made to pellagra patients. Eleven cases were examined.

Forty-eight infant welfare visits were made.

Ninety-seven pre-school children were examined.

Eighty-six adult cases were visited.

Three girls were brought home from Tallulah Falls Industrial School where they are making a good record. Provision was made for the nine year old boy in the family to attend school there another year.

The nurse assisted with this work.

T. G. Hall, Director,
County Health Department.

DEPARTMENT OF ROENTGENOLOGY

By T. A. Pitts, M. D., Columbia, S. C.

CANCER AND THE GENERAL PUBLIC

By W. M. Sheridan, M. D., Director X-Ray and Radium Institute, Spartanburg, S. C.

Probably too much publicity has been given the fact that we do not know the exact cause of cancer and the public has not yet been sufficiently educated to ask for periodic health examinations or to recognize pre-cancerous lesions or cancers in their earliest stages. The Greater New York Committee on Health Examinations and the American Society for the Control of Cancer have conducted publicity campaigns which have proven very valuable.

However, the general public in South Carolina has received very little education along these lines and believe that the State, District and County Medical Societies should see that this information reaches the public. The cooperation of the public health offices and county health units should also be sought. The value of periodic health examinations should be taught in the High Schools and Colleges. County health departments and local medical societies should also have active publicity committees who prepare articles for newspaper publication and radio broadcast. Speakers should also be furnished for community meetings. The County Medical society should also send out Bulletins to the

medical profession stressing the necessity for recognizing the disease in its earliest stages.

The end results of five year cures obtained in the treatment of cancer depends more on the stage of the disease than any other single factor. The public has been assiduously taught that we do not know the cause of cancer, but have not been instructed that continual irritation, over a long period of time, is often the predisposing cause of cancer. They do not seek medical advice early because they hope the lump in the breast or the small sore on the skin or in the mouth is of little consequence. They believe that cancer is practically hopeless and incurable. They do not consult the family physician until too late because they are afraid of operations. They do not realize that by waiting that their chances for a permanent cure are greatly reduced. The public should also be taught that X-Ray and Radium are very often the only agents necessary to be used in treating cancer of the skin, mouth, tongue, lip and cervix. Many patients would come early if they but realized that there was some means, other than surgery to be used in the eradication of cancer. The public should also be taught that a lump or sore is not necessarily cancerous and that the most important thing of all is to seek medical advice early.

SURGERY

Wm. H. Prioleau, M.D., Charleston, S. C.

THE TREATMENT OF EMPYEMA BY ASPIRATION AND AIR REPLACEMENT WITHOUT DRAINAGE

In the past few years there has been a number of advances in the treatment of acute empyema. For the most part these have been concerned with the securing of adequate drainage by modifications of the closed method. They have been more or less complicated and thus their application has been proportionately limited.

Recently an entirely different closed method has been described. It is based upon the principle of intermittent complete drainage with air replacement by means of thoracentesis. In some cases it is easy of application while in others its successful performance is technically very difficult. It has been developed by Dr. Joseph A. Danna of New Orleans. It is described by him in the *Journal of American Medical Association* of May 2, 1931.

The basis of the treatment is the aspiration of the complete contents of the cavity with the simultaneous replacement of the same volume of air. Thus alternately fluid is withdrawn and air is injected in 50 cc quantities until the cavity is empty. If it were not for the introduction of air only part of the contents could be removed. The fluid settles to the bottom and thus becomes accessible. The emptying of multilocular cavities requires the placing of the patient in various positions so as to favor gravitation. Other disconnected

cavities are emptied in the same manner. Should large masses of fibrin occlude the needle and prevent aspiration they may be removed through a small intercostal incision by means of forceps, the patient forcing the plugs into the opening by coughing. The incision closes spontaneously and does not form a discharging fistula.

The procedure is repeated at intervals of from four to ten days according to the re-accumulation of the fluid. Generally three to six aspirations are sufficient. In case of reinfection from a bronchial fistula or cortical abscess they have to be continued much longer. Should the patient not show great improvement following aspiration, another cavity or some other condition is almost certainly accountable. The limitation of the cavities can be well defined by taking X-Ray pictures with the patient in different positions, the air always rising to the top.

The author reports very satisfactory results in a series of thirty-five consecutive cases. There were two deaths which cannot be attributed to the method. The remaining cases went on to complete recovery. In no case was operation necessary.

(Editor's Note) The method is fundamentally sound. Its practicability will vary with the type of case and the ability of the surgeon. It gives promise of revolutionizing the treatment of those cases which have a cavity of some size situated against the chest wall. It is worthy of a trial.

MINUTES

MINUTES OF HOUSE OF DELEGATES CONTINUED

THE COMMITTEE ON MEDICAL ECONOMICS

The Committee has tried to keep informed of the trend of medical economics during the past year. It feels that while many important changes in the economic status of physicians are slowly making themselves apparent, no outstanding event has occurred locally which calls for action on the part of the South Carolina Medical Association. The changes are national and indeed international in character and call for calm consideration and judgment. The general question is being studied, and data being collected by the Committee on the Cost of Medical Care. Your Committee, therefore, merely suggests that the members of the South Carolina Medical Association keep themselves informed as to the work of this National Committee and await the conclusions and suggestions. It will then be in order to study the conclusions of that Committee with a view to utilizing them insofar as they bear upon our local conditions.

Olin B. Chamberlain, M. D., Chm.
A. Johnston Buist, M. D.
J. Heyward Gibbes, M. D.

REPORT OF COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

From our information, our State Medical College is rather seriously handicapped by the lack of funds. We regret this action on the part of the Legislature. It seems necessary for the state to maintain a medical college and if it must maintain one, it must be a Class "A" college, or not at all. In Class "A" colleges, certain full time faculty standards are required. These must be paid by appropriation and this appropriation has been materially cut. The standard has been maintained, but at a great sacrifice on the part of many. It seems fitting that we go on record urging an adequate appropriation and pledging our individual support to the move.

Your committee feels that it is within your province to urge the continuance of the post-graduate course at the Medical College of South Carolina provided the faculty deems it advisable. If the College authorities need an appropriation for this purpose, it should be supported by the members of this organization by urging our legislators to pass the necessary legislation. We wish to commend the Pediatric session known as the Semina as we feel it is of great value as a source of information and education.

We wish to commend our Washington representatives for their part in securing the much needed Veterans Bureau Hospital for this state.

Our hospitals are being called upon to meet certain requirements as to records, staff meetings, autopsies, etc., to become standard hospitals. These requirements are imposed by certain national organizations which have as their object, no doubt, the improvement of medical service. They are, however, increasing the cost of medical care to some extent and causing a few hospitals some apprehension as to their ability to continue to meet them as they have a tendency to increase almost yearly. The cooperation of the physician is often lacking. They will not complete records, attend staff meetings, get autopsies, etc., yet they share the light in which the hospital is placed, and they too are first to become critics.

Your committee would like to impress upon you the necessity of coming to your hospital's rescue either in getting the requirements limited, or by closer cooperation, or both.

Respectfully Submitted,
T. A. Pitts, M. D., Chairman
J. S. McLeod, M. D.
J. M. Beeler, M. D.
C. J. Lemon, M. D.

Committee on Medical Education and Hospitals

REPORT OF THE SCIENTIFIC PROGRAM COMMITTEE

It has been the desire of the Committee to institute certain changes in the Clinical Program this year which will not only improve the scientific value of the meeting, but will add to its physical attractiveness.

With two such distinguished guests as our President, Dr. Lynch, has obtained, we are assured not only tremendously interesting orations, but also the latest scientific advances in their respective fields.

The committee has felt it wise to limit the number of papers to twenty-five. In view of the success attained last year in Florence with the limited number of papers, it is our belief that this is as many as can be covered in a two day program.

This year we are making a departure from the established customs. The afternoon of the second day, that is May 7, will be devoted to clinics in the various hospitals of Greenville. Realizing that our State Association quite properly, should not have a program divided into groups, we feel, however, that it might be very well worth while to have clinics in the various hospitals covering varied subjects which will permit the members of the State Society to attend the particular clinic of their choice. The Greenville City Hospital will present surgical and medical clinics in charge of Dr. G. T. Tyler and Dr. G. R. Wilkinson, respectively. At the Shriners Orthopedic Hospital, Dr. Warren White and Dr. T. Boykin Clegg will present an orthopedic clinic. At the Greenville County

Tuberculosis Hospital, Dr. S. E. Lee will present a group of tuberculosis patients. It is our hope that this plan will meet with the hearty approval of the State Association.

Respectfully submitted,
 Hugh Smith
 G. R. Wilkinson
 W. T. Brockman.
 Scientific Program Committee

REPORT OF COMMITTEE ON CONSTITUTION AND BY-LAWS

To the House of Delegates,
 South Carolina Medical Association.
 Gentlemen:

Your Committee on Constitution and By-Laws begs to report that the constitution and by-laws of this Association conforms to the recommendations and requirements of the American Medical Association in all details with the exception of the election of a Speaker of the House of Delegates. Since this proposal was defeated by the House of Delegates at their 1930 meeting, we have no recommendations to make.

Respectfully,
 Douglas Jennings, Chm.
 Jas. S. Fouche
 L. J. Ravenel

REPORT OF THE COMMITTEE ON NECROLOGY

Mr. President and Gentlemen:

It is an honor at this time to pay tribute to our brother physicians who have passed on since we last met. Some have been called in the fresh morning of their lives with the hopes and idealism of youth; some in the heat of midday, with its many disillusionments and heart aches, but with the joy of service well done; and others have been summoned in the evening of life, showing the way of happiness to us still in our pilgrimage, but they have all "died with their faces toward God, gentlemen unafraid," and unashamed.

Robert Louis Stevenson said "The Doctor is the flower of our Christian Civilization. You will find priests and prophets everywhere, but you will find the doctor as we know him only where you find people touched by the tenderness and the pity of the Cross."

"God's ways are dark and in their gloom we walk;
 Not ours to know why life's grim spectres stalk.
 We tread mysterious paths in touch with pain,
 Birth, death, disease, strange phantoms of the brain.

Yet though what change the fuller days may bring,
 One ancient lesson will be ever new:
 One priceless lesson will be forever true;
 To give what none can measure, none can weigh.
 Simply to go where duty points the way.
 To face unquestioning the fever's breath,
 The deepening shadows of the vale of death;
 To bear Christ's message 'mid the battle's rage,
 The yellow plague, the lepers island cage,

And with our noblest, well to understand
 The poor man's call as only God's command;
 Ay, under every century's changing sky
 Shall the Greek Master's triple signal fly,
 Faith Honor Duty—Duty calmly done,
 That shouts no self-praise o'er a victory won;
 One bugle note your only battle call,
 One single watchword, Duty, that is all."

The following names comprise the roll of our honored dead:

Benjamin Hiram Baggott,
 J. C. Bonner,
 I. J. Campbell,
 John G. Edwards,
 Philip H. Eve,
 W. F. Divver,
 J. Mercier Green,
 W. M. Gaillard,
 Huger T. Hall,
 Baxter Haynes,
 Theodore Brevard Hayne,
 Ed Kirkland,
 J. R. Miller,
 J. F. Shirley,
 J. S. Shuler,
 William Simons,
 James Thornwell Hay,
 S. A. Wideman,

Respectfully submitted,

REPORT OF THE STATE BOARD OF MEDICAL EXAMINERS OF SOUTH CAROLINA FOR THE YEAR 1930

Applicants for Examination

Doctors	June exam. 35; Nov. exam 3	38
Nurses	June exam. 103; Nov. exam. 116	219
Total		257

Doctors

White males (including one Osteopath)	35
White females	0
Colored males	3
	—

Nurses

White	205
Colored	14
	—
Total	219

The Board met at Columbia, S. C., in July and November 1930 to tabulate the grades made by the applicants at the June and November examinations with the following results:

Doctors

White passed 35; colored passed 3; total	38
White failed 0; colored failed 0; total	0
	—
	38

Nurses

White passed 182; colored passed 5; total 187
 White failed 23; colored failed 9; total 32
 Total 257

A. Earle Boozer, M. D.
 Secretary.

REPORT OF THE STATE BOARD OF HEALTH

By Robert Wilson, M. D., Chairman, Charleston, S. C.

The activities of the State Board of Health during the past year, carried on under the various departments, can be presented only in the barest outline.

During the first nine months of the year there were 28,810 births, and increase of 1,161 over the births during the corresponding period of the previous year. For the same period there were 16,468 deaths, a decrease of 315 over those of the previous year.

The following conditions and diseases showed an increased mortality: automobile accidents; alcoholism; circulatory diseases; dysentery; intestinal diseases in children under 1 year of age; kidney diseases; meningitis; pneumonia, lobar and bronchial; typhoid fever. Diphtheria antitoxin was distributed at a cost of \$20,293.55; typhoid bacterin, \$11,000.00; small-pox vaccine \$7,020.00; and anti-meningococcus serum, \$696.95.

The epidemiologist made a sanitary inspection of each of the state educational institutions and the charitable and penal institutions, to wit: Clemson College; The Citadel; the De La Howe Training School; A. and M. College at Orangeburg; Cedar Springs Institute for the Deaf and Blind; the University of South Carolina; Winthrop College; the Medical College; Industrial School for Girls; State Reformatory for Colored Boys; Confederate Soldiers Home; State Penitentiary; Institution for the Feeble-Minded; Industrial School for Boys; and State Hospital.

The malariologist reports an increase in the number of cases of malaria over the previous year, 13,326 having been reported, notwithstanding active anti-malarial work.

The sanitary engineer has made a special effort "to improve both sanitary and economic conditions of small water and sewer systems in the state." Pollution of four municipal water supplies have been investigated and proper corrective measures instituted. Sewage conditions in six cotton mill villages have been inspected and corrective measures recommended. In January, February and March monthly inspections

were made of all shellfish shucking plants. These careful inspections and the insistence upon compliance with our shellfish regulations admits this product to foreign markets.

The Bureau of Child Hygiene and Public Health Nursing has covered a wide field. A great deal of time was spent in the organization of the State Council for Child Hygiene and Protection in South Carolina, project sponsored by the American Child Health Association, whose representative, Mrs. Walter McNab Miller, rendered invaluable aid in getting the council under way. The Hygienic Laboratory has made 14,693 miscellaneous diagnostic examinations; 49,407 Wassermann and Kahn tests; has given anti-rabic treatment to 706 patients; and distributed 198,905 c.c. of typhoid bacterin.

Too high commendation cannot be given Dr. Smith and his co-workers in this laboratory for the splendid service to the medical profession and to the people of the state, and an effort should be made to endeavor to have them paid salaries commensurate with their abilities.

The Department of Rural Sanitation and County Health Work has rounded out its 20th year of service, during which time it has grown from a small staff whose efforts were devoted chiefly to the eradication of hookworm to the present large organization. At present there are full time health units in 23 counties and their activities cover practically the whole field of disease prevention; sanitation; prenatal and maternal hygiene; and school hygiene.

The South Carolina Sanatorium was considerably enlarged through 12 additional beds in the children's department and the opening on July 10 of the infirmary for white women donated by the Masonic Order of South Carolina, which contains 48 beds. This building has been named Du Rant Hall in fitting recognition of the earnest and untiring work of Mr. Charlton Du Rant.

The department of Hotel Inspection has been conducted as heretofore. In the first nine months of the year six hundred and seventy-three inspections were made, an increase of 123 inspections over the corresponding period of the previous year.

In conclusion, to quote the report of the Health Officer, we feel "that we have done faithful work for the care of the health of the citizens of this State . . . and we are able to say that compared with other states South Carolina is well to the front and that the cost of maintenance is less per capita than in other states maintaining similar organizations."

SOCIETY REPORTS

RIDGE MEDICAL SOCIETY MEETS

The Ridge Medical Society met, June 15, 1931, at eight o'clock with a good attendance.

Dr. W. P. Timmerman exhibited a patient who had been sick for many months with varied symptoms. It elicited many questions and discussions and possible diagnosis. During the discussion a diagnosis of psychoneurosis was suggested which caused considerable comment. Dr. S. E. Harmon took the position that there was no such malady as psychoneurosis, that the symptoms were manifestations of some diseased condition.

Dr. D. S. Keisler reported a case of puerperal eclampsia with a resume of conditions, treatment, etc., with recovery.

Dr. D. B. Frontis reported two cases of pregnancy and labour with resume of symptoms, treatment and results, which were varied and different.

Dr. W. T. Gibson reported a case of coma occurring eleven days after delivery ending fatally.

Dr. W. P. Timmerman made a concise report of a case with cerebral symptoms which ended fatally within three days.

This case was discussed by Drs. R. H. Timmerman and W. T. Gibson who also helped to treat the case.

Drs. Keisler, Gibson and Oxner reported cases of spider bites of the genital organs.

Dr. Keisler reported having treated an old woman with a bad vaginal discharge which upon being properly examined revealed a ball of cotton in the posterior cul de sac which was very offensive.

Dr. Timmerman exhibited a ring pessary which he removed from a middle aged woman many years ago. It had been in her vagina so long that about half of it had become imbedded in her vaginal tissue which had to be incised before its removal.

All of these case reports caused much comment.

Dr. T. A. Pitts, President of our District Association, read an interesting and instructive paper on Physio-Therapy.

Supper was served by Mrs. Faust in The Commercial Hotel.

The following named officers were elected for the next year.

Dr. J. D. Waters—President, Saluda, S. C.

Dr. James Crosson—Vice-President, Leesville, S. C.

Dr. W. P. Timmerman—Secretary-Treasurer, Batesburg, S. C.

The President will name the various committees.

The Ladies' Auxiliary met at Mrs. E. C. Ridgell's.

W. P. Timmerman,
Sec.-Treas.

COLUMBIA MEDICAL SOCIETY

Columbia Medical Society Hall, June 22, 1931.

Second regular meeting of the month called to order at 8:30 P. M. by the President Dr. James S. Fouche, at the Columbia Medical Society Hall, June 22, 1931.

Minutes of last regular meeting read and adopted.

Committee reports: Dr. Harmon reported regarding insurance committee that the information promised by the insurance company from the Attorney General had not been given him and as yet was not complete.

Dr. Harmon reported further that the City Board of Health hasn't passed the United States standard milk ordinance and that it will probably soon be put into effect.

Application of Dr. Ion L. Weston for membership read to the society.

Clinical pathological conference case was presented by Dr. Emmett Madden. It was abdominal tumor arriving from non mesenteric portion of the intestine. Diagnosed by Dr. Madden as parasitic fibroid. Discussed by Dr. Zemp, Dr. Harmon and Dr. W. R. Barron. Dr. Plowden closed the conference giving the probable diagnosis as (1) dermoid (2) Mickle diverticulum which had become cancerous. The section shows a large spinal cell sarcoma.

Dr. Fouche announced the next meeting with Drs. Hugh Smith and Frank Durham on the program. The president also announced that the chairman of the recent forward movement of Columbia of the Chamber of Commerce had congratulated the doctors on their reaction towards the campaigns.

22 members present and one visitor.

Society adjourned at 9:12 P. M.

Respectfully submitted,

William Weston, Jr.

Secretary.

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, JUNE 9TH, AT 8:30 O'CLOCK

The meeting was called to order by the President, Dr. J. Sumter Rhame.

Present: Doctors: Banov; Beach; Boette; Bowen; Burn; Cain; Cathcart; de Saussure; McCrady; Mood; O'Driscoll; Pearlstine; Prioleau; Ravenel; Rhame; Rutledge; W. A. Smith; W. H. Speissegger; Townsend; Waring; Whaley; I. R. Wilson; R. Wilson. (23)

Guests: Dr. P. M. Temples of the Medical College, and Dr. Hillyer Rudisill of the Roper Hospital.

The minutes of the meeting of May 26th were read and confirmed.

Under Reports of Officers and Committese, Dr. G. McF. Mood, Chairman of the Board of Commissioners of Roper Hospital, submitted the annual report of

the Board, including audit by the certified public accountant. This report was not read, but the Chairman stated that printed copies would be delivered to the members of the Society at a later date. The report and audit were accepted and ordered filed.

Dr. R. S. Cathcart, Chairman of the special committee appointed at a previous meeting to arrange for the preservation and restoration of the valuable books in the library, submitted the following report:

At a meeting with the Librarian, the Library Committee and the Special Committee appointed by the Society to confer regarding the preservation and restoration of the books, the following recommendations were adopted:

1. That the Medical Society of South Carolina request the cooperation of the Medical College of the State of South Carolina in the restoration and preservation of the books valuable in their library.

2. That the Medical College of the State of South Carolina be requested to provide shelving room in their new library and for the future care of the books by their library staff under such regulations as may be agreeable to both parties.

Respectfully,

Edward Rutledge, M. D.

W. Atmar Smith, M. D.

Robert S. Cathcart, M. D.

Special Committee for the Society

W. Cyril O'Driscoll, M. D.

Librarian

Robert Wilson, M. D.

Robert L. McCready, M. D.

Library Committee

It was moved, seconded and carried that the report be accepted and the chairman of this committee be authorized to confer with the Medical College authorities with the view of carrying out the program suggested and that the committee be given power to act.

It was also moved, seconded and carried that one hundred and fifty dollars (\$150.00) be appropriated from the Society's funds to be applied to the restoration and preservation of the valuable books of the library.

The Scientific Session was called at 9:00 P. M.

Dr. J. F. Townsend reported a case of ectropion, resulting from burn, in which a graft was taken from the lower lid. The case was exhibited and results shown. This was discussed by Dr. F. R. Price.

Dr. James J. Ravenel reported and exhibited two cases: one of carcinoma of the urethra following stricture and frequent instrumentation, and the second case a of embryonal carcinoma of the testicle. These cases were discussed by Dr. Townsend and Dr. Byrnes, Dr. Ravenel closing.

Dr. H. J. Bowen reported an interesting case of carcinoma developing in one of the glands of the neck. This was discussed by Dr. Prioleau.

Dr. P. M. Temples gave a supplementary report on a case which he had previously presented to the Society as a possible case of monocytic leukaemia. Since his first report, the patient developed peripura hemorrhagica. He stated that the final diagnosis was acute leukaemia.

There being no further business, the meeting adjourned.

W. Atmar Smith
Secretary.

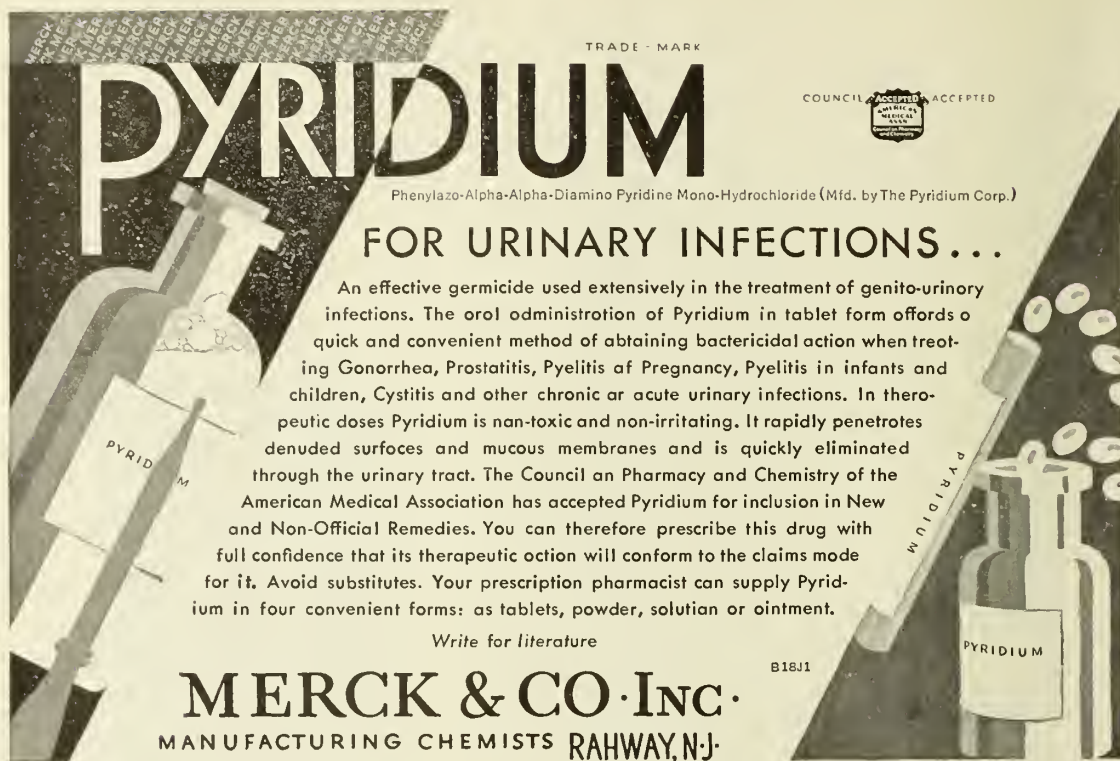


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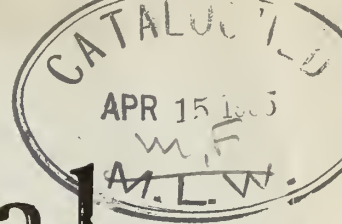
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The Journal

of the

South Carolina Medical Association

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NO. 8

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Illustrated Booklet on Request

The Journal

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EDITORIAL

DR. ROBERT WILSON RESIGNS CHAIRMANSHIP STATE BOARD OF HEALTH. DR. WILLIAM EGLESTON ELECTED SUCCESSOR.

For about thirty years Dr. Robert Wilson of Charleston has presided over the State Board of Health of South Carolina as its Chairman. We believe this is a record unsurpassed in this country for continuous service in such a capacity. When Dr. Wilson became a member of the Board the total appropriation probably did not exceed ten or fifteen thousand dollars. At the present time the Board, from all sources, receives more than a quarter of a million dollars annually. Marked confidence in the wise leadership of Dr. Wilson has been shared both by the public and the medical profession. The spectacular growth of the Board's activities necessarily invited criticism at times as is the case with all successful enterprises. For the most part, however, the State Board of Health of South Carolina has received the unqualified support of the members of the

legislature the medical profession, and the general public. For three decades Dr. Wilson has been a bulwark of strength by virtue of his unswerving integrity, his wide learning, and his great ability as an executive officer. Fortunately Dr. Wilson will remain as a member of the Board. He resigns the Chairmanship because of the press of other duties including the Deanship of the Medical College of the State of South Carolina.

The newly elected Chairman, Dr. William Egleston of Hartsville, has been a member of the Board for about twenty years and in that time has shown an unusual interest in every phase of its activities. Dr. Egleston long ago became an outstanding public spirited citizen, especially in the field of preventive medicine in his home community. The city of Hartsville acquired national fame for its health activities early in its history due in a large measure to the cooperative efforts of Dr. Egleston. In the past two decades when the expenditures of the Board amounted to hundreds of thousands of dollars

the experience of Dr. Egleson as a financier has been invaluable.

The personnel of the Board as now constituted is as follows: Jas. A. Hayne, M. D., Secretary and State Health Officer, Columbia; Robert Wilson, M. D., Charleston; Davis Furman, M. D., Greenville; E. A. Hines, M. D., Vice-Chairman, Seneca; Wm. Egleson, M. D., Chairman, Hartsville; W. R. Wallace, M. D., Chester; L. D. Boone, M. D., Lang ey; F. M. Routh, M. D., Columbia; Geo. W. Dick, D. D. S., Sumter; J. Lee Carpenter, Ph. G., Greenville; Jno. M. Daniel, Atty-Gen., Columbia; A. J. Beattie, Comp-Gen., Columbia.

EX-PRESIDENT E. W. PRESSLEY PASSES

The death of Dr. Pressly at his home, Clover, S. C., July 24, brought keen sorrow to the medical profession of South Carolina. Dr. Pressly was a man of unusual intellectual attainments and indeed a most lovable character. For forty years he had come in close contact with men, women, and children and thus inspired a genuine affection accorded to few citizens of any community. The medical profession honored him on numerous occasions and perhaps it is well to tell again the story of his life as it was penned in an editorial following his election to the Presidency in 1919.

"Dr. Pressly has been one of the most active members of the organization, filling a number of positions of honor. He is especially well known as a brilliant speaker and has charmed the State Association frequently by his eloquence.

"He was born in Anderson County, S. C. November 20, 1863; lived at Due West, S. C.

from December 1871 to April 1887. Graduated from Erskine College, June, 1883—graduated in medicine from the University of Maryland, 1887. He practiced his profession, at Clover, S. C., from 1887 to August, 1917, when he entered the army at Camp Sevier, S. C., as first Lieutenant, August 16, 1917. He was promoted to a Captaincy November 25, 1917; promoted to a Majority June, 1918, made commanding officer Base Hospital, Camp Sevier, August 16, 1918; promoted to Lieutenant-Colonel September 11, 1918."

PLANS FOR COLUMBIA MEETING 1932.

The Secretary visited the Columbia Medical Society recently and discussed some of the plans under consideration for the next meeting of the State Medical Association. It is hoped to make special features of dry clinics, scientific exhibits, and commercial exhibits. The central location of Columbia always assures a large attendance. At the present time few cities have the splendid facilities for taking ample care of a Convention as has Columbia. There is a fine auditorium, and the hotel accommodations have been greatly enlarged. The highways leading into the Capital City are all that one wishes for. The Columbia Medical Society is now the largest County Society in the State, having more than one hundred members. The Woman's Auxiliary has shown remarkable activity in the past year and this enthusiasm will be reflected in the plans for the entertainment of the Convention. The Columbia Society has already appointed its General Committee on Arrangements of which Dr. M. H. Wyman is the Chairman. Many other committees will cooperate with the central committee in putting on the greatest program the State Association has ever had.

PRESIDENT'S PAGE

By Charles A. Mobley, M. D., Orangeburg, S. C.

THE CONSERVATION OF HUMAN LIFE

NUMBER I. APPENDICITIS

The problem of appendicitis was solved years ago and the natural result that we should expect would be that the mortality of this disease would now be close to the vanishing point. Unfortunately, this is not true and recent statistics go to show that the mortality rate is on the increase. There is undoubtedly a cause for the existence of such a condition and it can largely be explained by the faulty conception that the public has of this disease.

The layman seems to have an idea that appendicitis is a minor affair. It is common, he hears of it every day and its dread and sinister side is apparently unknown to him. Upon having a pain in the abdomen, the layman will usually resort to a purgative at once, he has an idea that if his bowels will move his troubles will be over. In an appendicitis we are now convinced that a thorough purging will cause perforation in a great majority of cases.

Even when convinced that he has appendicitis he is very prone to procrastinate, being perfectly willing to take a chance upon the probability of his recovery from the attack. When the attack does not pass off we have one of the reasons for the increase in the mortality of appendicitis. Sometimes in the gangrenous type and when perforation has occurred we have little pain, temperature, etc. Here the layman is prone to delay. Pain the whip that should urge him toward relief being absent.

We as physicians can be doing our part toward the conservation of human life by educating the public in regard to the following facts:

- (1). If every case of appendicitis was operated upon at once there would be practically no mortality.
- (2). Purgation in appendicitis means perforation. Perforation means abscess formation or peritonitis.
- (3). Delay causes complications and increases the death rate.
- (4). Surgical removal of the appendix is the only treatment.

ORIGINAL ARTICLES

*THE EARLY DIAGNOSIS OF CHRONIC GLAUCOMA

By J. W. Jervey, Jr., M. D., Greenville, S. C.

It cannot be denied that a specialist is somewhat at a loss to know with what to interest a group of general practitioners such as most of the present company are. I will not, however, have recourse to any of the usual apologies, for today a subject is presented which should be of intense interest, and is certainly to many of utmost importance.

A blind man is indeed an object of pity. Who among you know what it is to be without the power of sight? Some of our own profession have been and are the victims of a pathological process which can often be checked or ameliorated before that total void of utter darkness has spread its everlasting shroud about an otherwise healthy and normal body. More of the laity have been and are the sufferers from a condition now beyond hope when an early diagnosis might have saved them to the joys and comforts of useful vision. Is it not strange that there has been so little in the literature about the early recognition of an affection the ravages of which can bring such torment and despair? Is it not strange that this information easily obtained from writings on ophthalmological subjects has not been codified and simplified for the benefit of the general practitioner and of the public? Many of you do know, all of you should know, and will have heard when I have done that chronic glaucoma is a condition which if recognized in its incipiency can in many cases be controlled and in some instances apparently cured. The purpose of this paper today is to emphasize to you the importance of this fact.

To begin with, what is glaucoma? Here at the very outset we are at a tremendous disadvantage because of our ignorance as to the

exact pathological significance of this descriptive term. The condition is variable and its manifestations protean. We are forced to call it an affection of the eye in which destructive tissue changes are produced by increased intraocular tension.

Glaucoma may be acute and congestive or chronic and noncongestive. Especially the latter type is apt to progress beyond hope of recovery before the diagnosis is made. The acute congestive type is often difficult to distinguish from an acute iritis with hypertension. Let us digress for a moment because of the great importance of what is to follow immediately. If the condition is essentially an iritis, atropine is indicated even in the presence of hypertension; if, however, glaucoma is the underlying factor, atropine is the worst thing that can be used. I take this occasion to warn you that in any case where there is the least doubt responsibility of treatment should be shifted to an ophthalmologist. *Atropine is not a panacea for every condition presenting an acute inflammation of the globe.* Early diagnosis in chronic cases is what I wish to stress today. Many writers, notably Elliott, are of the opinion that the acute and chronic conditions are phases of the same process, and that the glaucomatous eye may pass from one to the other state interchangeably. Others are convinced that these two are separate pathological entities. It is not within the scope of this paper to discuss the various opinions on or theories of glaucoma, nor will any of the modes of treatment be recited. If this communication is to be of any worth whatever you must accept the fact that when an early diagnosis is made proper therapy in these cases is of inestimable value.

Simple glaucoma, as the chronic noncongestive type is called, is first apparent, as a rule, in elderly persons though it may manifest itself considerably earlier, symptoms not infrequently being noticed early in the fourth decade. These patients more often than not are of a distinctly nervous tempera-

*Read before the Laurens County Medical Society March 23rd, and the Greenville County Medical Society April 9, 1931.

ment. The Jewish race is apparently peculiarly susceptible. It is not true that myopic eyes are immune to this condition, though it does seem true that the percentage is less in myopia than in hyperopia. (Knapp).

Among the first things noted by the patient are transitory attacks of dimness of vision. This point cannot be too strongly emphasized. Frequently associated with this symptom is what is known as rainbow vision. The patient on looking at a bright light at night sees about it a halo consisting of one or more colors of the spectrum. This effect is strongly indicative and is due to changes in the refractive index of the cornea caused by edema produced by increased intraocular tension. This halo is not to be confused with the yellowish halo which under certain conditions any normal eye may observe. Such attacks pass away quickly and may not return for weeks or months. The point is that this history is extremely important and one should not dismiss it with a casual wave of the hand.

If the patient is at or near the presbyopic age the only symptom giving a lead to the diagnosis may be a frequent desire to change his reading glass, or a decided preference for a presbyopic correction too strong to be consistent with his true refractive error.

Pain in the eye is usually absent save in late cases because in the chronic type the tissues have time to adjust themselves to the change in pressure.

Occasional vague headache not easily controlled and without reference to use of the eyes should arouse suspicion.

The anterior chamber is often shallow but this is not always true as there is a type of simple glaucoma where the anterior chamber is deep. The pupil may be of normal appearance or slightly dilated and is perhaps sluggish in reaction.

Ophthalmoscopic examination is of utmost importance and should be a routine procedure. This measure will serve to distinguish glaucoma from developing cataract with which it is only too often confused due to the greenish discoloration of the lens in the glaucomatous patient. If the case has progressed far enough examination of the fundus will show a cupping of the optic nerve head. Advanced cupping of the disc will offer no difficulty in diagnosis,

but the earlier cupping must be distinguished from a physiological cup and from that condition resulting from optic atrophy. The physiological cup is deepest in the center and gradually funnelling out toward the disc margin causes no kinking of the retinal vessels as they pass over the edge of the disc. This cupping is usually of limited extent and as a rule confined to the temporal side of the disc. The cupping due to optic atrophy is a shallow one involving the entire disc. There is no kinking of the retinal vessels which are usually constricted, and the disc is more often of a sharply white or gray appearance vividly contrasted with the more deeply colored retina beside it. The glaucomatous cup involves the entire disc, the lamina cribrosa stands out clearly, and the blood vessels, which often are drawn toward the nasal side, can be seen to dip down as they pass from the retina to the disc. Arterial pulsation confined to the disc will be present where the intraocular pressure exceeds the diastolic blood pressure but is less than the systolic. This sign is not pathognomonic but is very suggestive in the presence of other doubtful findings. (Elliott).

Acuity of vision is apt to be reduced, but even well advanced cases may have central vision of 20-20. Where this is true, however, the field of vision is often found to be constricted giving what is called "gun barrel" vision. Perhaps the earliest demonstrable sign in simple glaucoma is a rise in the light minimum, that is a rise in the threshold of the perception of retinal stimulation, a subject very thoroughly studied by Derby and his co-workers in Boston. This is a very valuable test but at present it has not been simplified sufficiently to be used by the general practitioner or even by the oculist in his routine examinations as it requires considerable time to adapt the eye to darkness, and there are many factors which may influence the results of the procedure.

Changes in the visual fields of these patients are interesting and important observations. Limitation is the rule. In the initial stages the most frequent finding is restriction of the field on the nasal side. This narrowing may involve the whole nasal field or the upper or the lower portion. A characteristic discovery is an encroachment on the nasal side above or

slow beginning abruptly at or near the horizontal axis giving on the chart the effect of a step. This step is known as Ronne's sign. It can frequently be found in very early cases by careful perimetry with a small test object. Quadrant defects are not uncommon and form a variation of the sign just mentioned. Scotomas usually occur, and except in earliest cases are confluent with the blind spot. On the other hand in incipient cases scotomas may come and go so that one or more negative results cannot be regarded as final. (Ferree et al) Sundry scotomas bear various names but it is unnecessary to enumerate them here. Most of you would recognize the names of Bjerrum, Seidel, and Elliott. The restriction of the color fields is commensurate with that of the form field and this point is of great significance in distinguishing glaucoma from optic atrophy where the color fields are markedly reduced while the form field may approach normal limits. Interlacing of the color fields is of fairly frequent occurrence.

So far no mention has been made of the determination of the intraocular tension. This has been left to the last to emphasize its importance. No reference will be made to the several types of tonometers in use. The general practitioner is not required nor can he be expected to have in his possession expensive instruments which of necessity belong solely to the armamentarium of the specialist. If, however, every one of you would make a practice of taking with the two index fingers the tension of the eyes of every new patient you see, a matter which would require about three seconds, you would probably not miss the first unrecognized case of chronic glaucoma that comes your way. It is well to note that there is no correlation between the increased intraocular tension of glaucoma and the hypertension of cardiovascular disease. In the earliest stages tension is not constantly increased, hence more than one examination may be necessary, preferably at different times during the day. Pressure is apt to be greatest in the later morning hours and least in the late afternoon (Elliott). It is this intermittent rise in tension that causes the transient premonitory symptoms and begins the havoc which only too often is

continued to a melancholy, woeful, and pitiable termination.

SUMMARY

Glaucoma is defined and it is asserted that the value of therapy varies inversely with the duration of the affection before treatment is instituted.

The practical points in making a diagnosis are:

1. The history of rainbow vision.
2. Transient attacks of dimness of vision.
3. A characteristic cupping of the disc.
4. Diminution of visual acuity.
5. Restriction of the visual field.
6. An increase in intraocular tension.

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*WE ESAUS

By Clay W. Evatt, M. D., Greenville, S. C.

From time immemorial wherever there has been a change in the socialologic or economic order the physicians along with all other groupshave been affected. It is in the throes of such a transition that the American physician now finds himself.

America is now the only important civilized Nation that does not have in some form State Medicine. In different parts of our country a variety of experiments are being carried on in an effort to find the best solution of the problem for patient and physician. There is not enough money in the world to pay a doctor for literally taking a part of himself and injecting it into someone, thereby transforming a forlorn, flabby and depleted individual into one of hope, health and happiness. The real fee is in the satisfaction of doing one's best, and who among us has not felt a thrill that no money can buy, when he beheld the gratitude in a mother's eye and heard her halting words of blessing as she saw the return of color to the pallid cheek of her child? Who among us on returning at dawn from having officiated at the beginning of a new life, has not had his heart to quicken at the fact that he had been assisting the Great Physician in His eternal plan? But even so, alas and alack, these satisfactions do not lift the mortgage or put meat in the larder. The physician must also have his pay in the coin of the realm. The plight of the physician has at times, however, been more precarious than now.

It seems that there has always been to a varying degree state supervision of medicine—for example, in Assyria 2080 B. C., the doctor's fees were fixed by law and penalties were imposed for malpractice. There is a record of a doctor saving the life of a man, operating with a bronze lancet successfully opening an abscess of the eye, the doctor received ten shekles of silver. The fee for the same service to a free man was five shekles of silver; for a slave two shekles. If, however, the patient lost his sight or died,

the doctor's hand was chopped off; if a slave died as a result of the treatment, the medical man had to substitute a slave of equal value. If the slave lost his eyesight, the doctor was forced to pay the master one-half the value of the slave in silver. This law seems unjust, but doubtless made the doctors quite careful of their patients. Even now the state requires the doctors to refrain from abortions except under certain conditions; prohibits and supervises the prescription of certain drugs, requires registration of certain diseases and of births and deaths.

The doctors in ancient Greece and Rome were extended many privileges; they paid no taxes and were even paid large salaries for that era. 'It is said that Democedes, public physician in Aegina, Athens and Samos, received in succession \$1200.00, \$2030.00 and \$2800.00 a year. That was a high salary at that time when the purchasing power of money was very great. This is in interesting contrast to some of our modern physicians whose average earnings even now are below that figure. A census of the 1901 and 1910 Harvard Graduates shows for the first year an average of \$1050.50, and that they practiced 12 years before their collections were in the neighborhood of \$5,000.00. There has always been a variation of fees according to the station and money of the patient. The matter of fees, as every doctor knows, is not according to what the work is worth, but how much the patient is willing to pay. I have many times heard a local doctor, when asked how much was charged, reply: "I charge just all I think you can pay." In 1929 the average collections in West Virginia were 79%. The eye, ear, nose and throat men averaged the highest, 92%. The Internists, lowest, 75%. The average gross income was \$9580.60; the highest net income was \$28,000.00 reported by a general surgeon, and the same amount by a general practitioner. The lowest net income was \$420.00 reported by a country doctor who had been in practice 24 years. These avearges are probably far above those for the country as a whole. In my student days I practiced two vacation periods in the coal mines of West Virginia and know first hand that compensation laws and contract practice assure the doctors

*Read before the Greenville Study Club, Greenville, S. C., April 2, 1931.

in that state of practically one hundred per cent collections from a class of laborers, a great many of whom under other circumstances would take their own good time to pay little or nothing.

Twenty-three of the leading countries of the world have some form of sickness insurance; seventeen rely largely on voluntary programs. Sickness insurance varies in each country and is a part of a much larger program of social insurance which covers a number of different classes of risks, economic, non-economic, sickness, maternity, invalidism, old age and death. Plans for collective protection against these risks were first formulated by the French Convention in 1794. In 1883 Germany passed her first law governing sickness insurance. Originally sickness insurance was designed to replace wages lost because of illness and incapacity. Later the purpose was to restore the individual to health and earning capacity as soon as possible. The shift was from compensation to treatment and restoration. The present day trend is toward prevention of disability. Different countries vary the plan to suit their several necessities.

In Germany wage earners whose incomes are below 3,600 marks are compelled to carry insurance to provide complete medical services, doctors, hospitals, specialists, nurses, etc. Also ninety-five per cent of the 7500 funds provide for the invalid's family. It is of interest to note that in Germany only five per cent of the physicians are in private practice, eighty per cent in insurance practice, the balance are on salaries in insurance funds, government positions, university professors, etc. In Great Britain the services of the general practitioner only are provided and that not to the family of the insured except at the option of the approved societies. In Denmark a complete family service is provided, and a penalty imposed on those who are not insured, thus encouraging a system of individual compensation. The state becomes the carrier of the insurance after 26 weeks, thereby lowering the costs to the individual; also hospital bills are reduced 50 to 75% to those insured, and in this way offers an inducement to become insured.

The doctors in every country are trying to

recover more voice in the administration of the details of insurance practice, also there is a desire to increase the number of physicians on salary rather than per capita or per visit basis. In Germany and Great Britain check-up doctors are used to investigate causes of prolonged illness or possible malingering, and the laxity of the doctor in deciding the patient's disability.

It is said that the total expenditures for all forms of medical care in the United States is only \$2,250,000.00 or 2.5% of our National income, or 0.2% of our estimated vital or human value; not an excess proportion of our wealth for our most valuable asset—health. We spend 5½ times that amount for luxuries and non-essentials. In the last 20 years the annual National income has trebled, from 30 Billion to 90 Billion. It is not thought that medical service has shared in this increased income as much as is justifiable. About 2-3 of the annual cost of medical care is borne by 20% of the population. The principle of insurance aims to distribute the financial burden over a large group of the population suffering from the big load on a few families to a light load on the community.

What is being done about it?

Forty-two states have compensation laws. These compensation laws interpret the disabilities of occupational origin as part of the cost of doing business. Seventeen states have established funds. The records of these states show that 90% of ill health is due to non-occupational causes. A number have considered sickness insurance; some are for and some against it. In the last 10 years there has been a 600% increase in group life insurance.

Different societies, groups, clinics and guilds have different plans for meeting the needs of their respective communities. Pay clinics have been established all about with varying results. The Bassett Hospital Guild, Coopers-town, N. Y., began the first of this year to provide a complete family medical service, except obstetrics, for \$100.00 a year per family; a personal letter from the superintendent under date of March 20th, 1931, states that it is working out very satisfactorily. So far they have 189 members in nearly

three months and have been called to see fewer than 100 members. He says, "I think there is no doubt that a plan of this sort is the solution, in part at least, of the medical economic difficulty today."

In Missouri and Nevada any county that wishes may have a general hospital; any patient may enter the hospital and be cared for adequately without the stigma of being pauperized. He may pay any price he is able to pay, this is to be determined by a competent superintendent of the hospital. His wages are taken into consideration; he may pay \$1.00 per day or more, may have as many nurses as he is able to pay. As to the doctor's fee, that is left to the patient and the doctor. Those states think the matter of fees should rest with the physician. A man who is able to pay \$1.00 per day hospital bill will not be expected by his physician to pay as much as the man paying \$10.00 for a room and having special nurses.

The American Medical Association has appointed a committee of about 64 doctors, dentists, pharmacists, nurses and economists who are studying the costs of medical care and will doubtless soon have some constructive recommendations to make.

A glance at the medical situation locally shows that at the Greenville City Hospital every month we have 74 free clinics where we give anti-syphilitic treatments free for \$2.00 a dose in competition with ourselves. X-rays of the chest are made there free for \$2.00 and by our new County Sanitarium free for \$5.00. At the Emma Moss Booth Memorial Hospital 16 free clinics per month are held. One of the local mills conducts 32 part-pay and part-free clinics; another has 4 free clinics. One mill supplies medical attention except obstetrics at ten cents per week for single employees and fifteen cents per week for those with families. There are 8 free tuberculosis clinics in town and free examinations at Sanitarium 20 days a month, also 8 orthopaedic clinics. A total of 162 free clinics per month. There is a free tuberculosis hospital, free orthopaedic hospital and a free maternity home besides the maternity beds maintained at each of the two public hospitals. There is free welfare work, community nurse, family bureau service, American Red Cross, Com-

munity Chest and free school examinations. The State locally has practically taken over all preventive health medicine, tuberculosis, orthopaedics and venereal diseases.

Rather than State Medicine I would prefer the condition as it is, but that seems impossible since the physician is being commandeered more and more every day he lives. Right now our local tuberculosis association is bending every effort toward a daily clinic in town. Some physicians think that the way out is for every member in good standing in the state medical association to quit free clinic and part free clinic. They think that as in the olden days—"Let every tub stand on its own bottom," is the remedy—they tell us that free clinics, compensations, bonuses, etc., have demoralized the people, that red blooded, honest, honorable, horney-handed, hard-headed American citizens who 20 years ago would fight at the mention of charity, are being transformed into spineless, thriftless ne'er-do-wells without pride or self respect, with socialistic tendencies.

It is said of State Medicine that the patient cannot select his physician; one of the first statements in the panel system in England is that the patient selects his physician, the panel board appointing physicians only when the layman has failed to exercise the right of choice. So far as that goes no patient on service at the hospital has choice of his physician, yet the mortality and morbidity rate, I dare say, is no higher than among private patients. As to personal interest in the patient being lost, I for one am just as interested in the welfare of my free patients as I am in the pay patients. As to killing the initiative, some of the most noble work of medicine has been done by men on salaries who did not have to let the matter of fees enter into their relation with the patient, and whose incomes were assured. As to state supervision, we have always had it to some extent. Our Nation is no longer a frontier country. America is no longer a country where the "richest are poor and the poor live in abundance." Recent economic changes in our country have made many men richer than they have ever been and it has made many more poor people, poorer than ever, and there is a possibility, even a probability,

that these poorest will even feel the pinch of want. The medical profession in the past has taken care of the latter class most nobly, but with their ranks swelling every day aided and abetted by organized charity workers, case chasers, etc., the physician is now imposed upon almost to the breaking point. Insurance medicine will pay the doctor for treating those he now treats for nothing. Under the panel system in Great Britain the doctors now receive approximately three times as much remuneration as they received for the practice on the same patients before the panel system was inaugurated; 90% of the physicians prefer it to the older systems. To me it seems that a change is inevitable and I hope that every American doctor will familiarize himself with the facts regarding various systems and methods of practice in other countries. It will be much better to meet this situation aggressively, take the matter in hand and work out a just, equitable and thorough system, run by physicians and offer it to the public, rather than to shut the eyes, stop up the ears, close the mind and sit stolidly by in fear and have it thrust upon us by a dictatorship of political laymen who have no real conception of the problems of medicine.

In the current issue of the Journal of the South Carolina Medical Association our own good President states, "we have plenty of business ability within the profession to operate even big business and it is not surprising to find that the operation of hospitals may be better conducted by doctors than business men, especially with the usual political entanglements of the latter."

In Denmark the system is managed almost entirely by physicians and quite satisfactorily. On the other hand in Germany the dictatorship is lay—and the physicians have been so handicapped that at present the best class of young men are not going into medicine. Also in Cuba the laymen who operate the Centros pay the doctors inadequately. It is needless to say that the medical standards of those two countries will be lowered and in the long run there will be increased mortality and morbidity rates.

Just what the final outcome of the situation will be it is impossible to say, what the best

solution is I do not know, but of this much I am certain, that since the formation of the American Medical Association there has not been a time when medical statesmanship was more needed. The purpose of this paper is not to advocate state medicine, but to make a plea that every doctor maintain a scientific attitude and an open mind, to do his part in bringing about a happy solution to this, the most profound problem ever to face organized medicine in America.

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*ASTHMA, HAYFEVER AND OTHER ALLERGIC CONDITIONS

By F. M. Routh, M. D., Columbia, S. C.

(1). 1. Von Pirquet coined the word Allergy in 1906, and described it as "the capacity of the body to react to foreign substances."

Francis Rackmann asserts "that it should be extended to include the capacity to develop hypersensitiveness to foreign substances and to do it easily."

Various theories have been advanced to explain hypersensitiveness, or that contact that certain individuals have with certain proteins which produce reactions varying from a slight discomfort, to alarming symptoms resembling anaphylactic shock, and sometimes terminating in death while other individuals with similar exposures experience no difficulties whatever.

(2). 2. Ruth Alvarez has summed up the theories of anaphylaxis as follows:

The Humoral Theory:

1. The initial inoculation takes from the blood some normal constituent, thereby

*Read before the South Carolina Medical Association, Greenville, S. C., May 6, 1931.

rendering it incapable of coping with a second inoculation of the same protein.

2. The first inoculation upsets the trypsin-antitrypsin balance of the blood, so that its chemical composition is changed, and a second injection is not properly absorbed.
3. The toxin-antitoxin balance is upset by the first injection and the second becomes toxic because of the lack of neutralization.
4. The first inoculation carries the production of a precipitinogen; the second, the formation of a precipitate, and the subsequent symptoms are caused by emboli.
5. When a foreign protein is first introduced into the blood its disintegration is slow, hence little of its disintegration is present at any one time. Subsequently, however, the power of protein splitting becomes accentuated, and upon the second injection of the same material this rapid breaking down of the protein gives rise to the presence of large amounts of toxic split products in the blood, these appearing faster than the elimination can take place. The accumulation of these gives rise to the condition known as anaphylaxis. This theory offered by Vaughan and Wheeler, was accepted as the most plausible until the recent investigations in the field of cellular response.

Second: As to experiments related to cellular history:

1. Smooth muscle tissue, such as that of the uterine horns of guinea pigs, can be sensitized by an injection of foreign protein. These strips of muscle, when excised, washed and touched with the sensitizing protein, give violent contractions. (Dale)
2. When a sensitized guinea pig is bled, and its former blood replaced by normal blood, the animal will show typical allergic reactions.
3. When smooth muscle organs from a sensitized guinea pig are transferred to a normal animal the latter becomes sensitive.

"Recent work tends to combine these theories of humoral and cellular response. There is a possibility that each protein has in its composition two component parts, one immunizing one sensitizing."

- (3) Oriel and Barber have isolated what they call a proteose from the urine in patients having active attacks of various skin diseases, serum sickness and severe cases of asthma, and theorize that the primary antigen may be a bacteria, the proteose a response to a secondary antigen derived from the action of the bacteria on the patient's tissue.
- (4) Mood in a personal interview stated to me that he believed infection was the precipitating factor in allergy, and that following out his theory he was making cultures from feces, urine, sputum, cervixes, prostates, sinuses, etc. By positive intradermal tests he was selecting the organism or organisms that the patient was most sensitive to and preparing autogenous vaccines of the organisms. By regulating the doses of vaccine results looked promising.
- (5) Frieberg and Dorst reports unusual success in what they term "allergic joint" by using similar methods.

The purpose of this paper is not to discuss the theories of Allergy but to call attention to certain practical considerations of our knowledge concerning this subject, the application of which will greatly relieve human suffering, and throw light on many hitherto perplexing problems.

The diagnosis is made by skin tests. One method the so-called scratch test where the protein is rubbed into a small scratch made in the skin by a sharp needle without drawing blood. The other, the intradermal test made by injecting an extract or a suspension of the protein directly into the skin. Positive tests will show an urticarial wheal with projections or pseudopodia extending from the wheal. The intradermal method is more reliable and will show more positives than the scratch method. Its routine use, however, is too time consuming, it is more painful, and the danger of severe reactions is greater. We do not use the group proteins believing that the individual ones give the best results.

(6). Vaughan has studied biologically related foods and reports that genetic groups some-

times show positives not found individually. He suggests that this method of testing might explain negative reactions to foods known definitely to give symptoms.

That victims of allergic conditions do suffer is particularly well known to all doctors of medicine no matter what specialty they are engaged in. These cases are much more common than the average doctor imagines. (7) Balyeat states that seven percent of the population of the United States suffer from Asthma, Hayfever, Eczema, Urticaria or other allergic conditions, and excluding their allergy are usually more physically perfect than the so-called normal people. Other conditions reported and responding to allergic treatment are rheumatism, allergic cough, angioneurotic edema, mucous colitis, bladder irritation, migraine, certain forms of epilepsy, Haenochs purpura, Menier's syndrome, abdominal colic, bad breath and other types of indigestion.

Classification of allergic cases is important and not particularly difficult in a majority of cases. History of family allergy is suggestive even though two generations away. Most of these patients will give the history if urged to find out when they do not know. Balyeat gives a family history of sixty percent. Our cases are similar or even higher.

Inheritance need not, and frequently does not produce identical symptoms in two persons, for instance, father or mother may have Asthma, the offspring hayfever, eczema or urticaria. The offending protein is usually different also. In other words every case is a law unto itself, and must be studied individually and painstakingly if results are to be expected. Practically all allergic cases show an increase of eosinophiles, and it is our opinion that increase in this type of cell indicates either allergy or parasites. We are quite aware that many conditions are listed and characterized as having increased eosinophilia but we believe that future study will corroborate the above statement.

Efforts to diagnose chronic complaints that do not include among other aids a careful inquiry regarding the history of family allergy, and a differential blood count are lacking in scientific accuracy.

Many physicians make no effort other than

palliative, and that for the relief of immediate symptoms when caring for these unfortunate patients. This is a serious mistake because time is a valuable asset, and the sooner the offending substances are discovered the more certain is cure or relief obtained. The longer allergic study is postponed the more proteins the patient may become sensitive to. This increase in offenders makes a correct diagnosis all the harder. Allergic patients have usually consulted many doctors, and securing little relief, and less hope, are prone to become the prey to all kinds of quack remedies suggested by well meaning but ill advised friends. He frequently gets relief or what to him is the equivalent, a natural remission of symptoms by the unconscious removal of the offender. Periods of remission are characteristic of practically all these cases.

When he gets into the hands of an allergist he expects to be cured immediately, and the referring physician occasionally expects too much.

An immediate cure is not the rule unless it so happens that the patient is sensitive to only one or two proteins, and they are discovered during the first tests.

Some patients are sensitive to dog hair, cat hair, feathers, or single foods, and are completely relieved by separation from the offender with no other treatment. We have one asthma patient sensitive to wheat who is free of attacks if she avoids flour dust or does not eat wheat products. Sifting flour or the ingestion of a small piece of wheat bread will precipitate an attack of asthma. The avoidance of wheat products greatly relieved an hypertrophic rhinitis of thirty-five years duration, and another case of mucous colitis of several years duration.

Most victims of allergy are multiple sensitive and results are directly proportional to the number discovered. This occasionally necessitates retesting by intradermal method of any protein that the patient suspects, or that the history suggests.

(8). Duke reports a case of bladder irritation caused by the ingestion of foods that the patient was sensitive to. This patient would void involuntarily during these attacks. Many cases of enuresis in children may be caused in the same way.

So-called frequent colds in children, particularly those that have a tendency to disappear within a day or so are often manifestations of allergy. Children of allergic individuals either with single or double inheritance are particularly prone to these attacks, sneezing, itching nose or eyes with a discharge of clear mucous from the nostrils is very suggestive of some sensitiveness. If this condition is allowed to continue the mucous membranes become so congested that drainage is interfered with, and infection produces the pathology that makes rich men out of the eye, ear, nose and throat specialists. Infection intensifies the symptoms, and should be corrected but better results are secured by eliminating such offenders as can be eliminated and desensitizing for those that cannot be avoided before attempting any operative procedures. These latter are the common pollens from trees, weeds and grasses. Pollens from bright colored flowers, such as goldenrod, daisies, sunflower, etc., are insect pollinated, and can be easily avoided.

Cases of Hayfever caused by pollens present probably the easiest of allergic conditions to correct particularly so if the pollens in question are correctly diagnosed. Extracts are made of pollens that the patient is sensitive to, and dilutions are made so that the beginning doses are very small. These doses are gradually increased in amount until the patient can tolerate a fairly large dose of the full strength extract. This full strength extract for us is a three percent solution. When the patient can tolerate .5 cc of the full strength extract we cut down the dose to about half that and give this amount every three weeks over a period of two to three years. The reason for this is that the immunity gained by the preseasonal method is soon lost, and if a cure is sought treatment must be continued throughout at least two seasons. We frequently find cases of hayfever complicated with a sensitiveness to foods, danders, dust, etc.

Allergic eczema is usually a combination of foods, feathers, danders, etc., and responds beautifully to elimination of the offending substances.

Some cases of Asthma are relatively easy to control, others present much greater

problems. Results depend absolutely upon the cooperation of the patient provided the diagnosis is correct. We have failed to relieve but few patients that cooperated, and these in aged ones who had no comeback. We also have quite a number of prolonged remissions to our credit.

Urticaria, angioneurotic edema, allergic rheumatism, migraine, purpura, etc., present problems that are not as easily solved as some of the foregoing, but the patient who presents himself suffering from these complaints deserves a careful history and physical examination as well as routine allergic study. This means skin tests of all the proteins that you can secure.

Poor nutrition occasioned by lack of appetite or fear of foods, anemia, various foci of infection, malaria, or other constitutional diseases, and endocrine disorders, particularly thyroid, exert a marked influence on these cases. Allergy cannot be divorced from internal medicine and internal medicine should not be divorced from allergy. The one is lacking without the other.

Cases of food allergy present perplexing problems. Sometimes foods which the patient is sensitive to fail to react. This, however, is no argument against the food tests, because you frequently get valuable information from the tests, and the readings should be in four to six hours and twenty-four hours afterwards. Foods show a delayed reaction more frequently than other proteins.

(9) Rowe is a strong exponent of elimination diets to rule out offending foods not detected by skin tests. His diets contain no wheat, milk and eggs, the three foods, usually in everyone's diet, and moreover frequent offenders. These diets contain sufficient calories, vitamins and mineral salts in spite of excluding the above three foods.

The following cases illustrate the possibilities of correct diagnoses in allergic conditions, as well as the difficulties sometimes encountered, and results that may be expected in a majority of cases, if constant supervision is given by the Allergist, and absolute cooperation by the patient. Case No. 1 Mrs. M. R., age 42, consulted us Feb. 2, 1929, with history of spring hayfever and asthma. There was a family history of asthma in the

father, also allergic brothers and sisters. Other than in the spring patient had no trouble whatever. She was tested with spring pollens and gave a marked positive reaction to hickory and pecan. Preseasonal treatment was begun immediately and continued with gradually increasing doses of the hickory and pecan extract until the season appeared. At this time she began having symptoms almost as severe as formerly. Additional tests were done and a four plus reaction to eggs was found. She was advised to exclude eggs and all foods containing eggs in any amount from her diet, after which she reported almost complete freedom from symptoms. Not completely convinced she yielded to the temptation of deviled eggs and spent a miserable night. From that time until the end of the pollen season she ate no eggs and continued to improve. August 23, 1930, she began to have attacks again and was tested and found positive to the ragweeds. She was given a few daily doses of a 1 to 10,000 ragweed mixture, and advised to again exclude eggs from her diet. Symptoms disappeared in about one week, and did not reappear throughout the season although treatment was discontinued with the disappearance of symptoms. In February 1931 she was tested with all foods, pollens, etc., and a number of other positives were found. In April of this year symptoms again reappeared, and were worse at night. She was advised to exclude feathers from her bedroom, and the following day reported much improvement in her symptoms.

This case is reported to illustrate the necessity of doing routine tests on all patients, even though the history is definitely seasonal, and the importance of constant supervision, as well as cooperation of the patient. It illustrates also the fact that patients acquire a sensitiveness to other proteins if symptoms are allowed to continue. This is the type of case that so frequently causes disappointment to both patient and doctor and discredits a very useful branch of medicine.

Case No. 2. This case is an example of the influence that infection sometimes plays in allergy.

Hayfever and Asthma. Miss C. J., occupation nurse. Previously reported by the author, *Ibid.* No. 10.

No family history obtainable. Physical examination and laboratory tests negative. Skin tests showed positive reactions to orris root, rice and a marked reaction to *Streptococcus Viridans*. It was presumed that this indicated the possibility of infection somewhere in the body. The sinuses and teeth were X-rayed and a large apical abscess was found at the root of the left central incisor. Sometime elapsed after the X-ray was made before the tooth was extracted and symptoms persisted in spite of the exclusion of rice, orris root, face powder, tooth paste and scented soaps. There were no symptoms of hayfever or asthma after the extraction of the tooth except on occasions when too large doses of either the Autogenous Vaccine made from cultures taken from the tooth cavity, and Orris Root extract which did precipitate reactions at times. This patient has had no return of symptoms since early in 1928.

Case No. 3. Miss E. H., Aug. 19, 1930. Perennial hayfever but worse in spring and fall, duration eight or nine years. Family history father has hayfever and migraine headaches. Physical examination and laboratory work indicated no abnormalities except a hemoglobin of 67% and some Tertian malarial parasites. Skin tests showed a positive reaction to goose and duck feathers, cat and dog hair, ragweeds, grasses, wheat and a few other foods. The total number of positive tests were 60 including many flowers. There was some bacterial sensitiveness. She was given an extract of Ragweeds and grasses combined with a stock bacterin and was advised to exclude the positive foods from her diet and to avoid the flowers that she was sensitive to. Treatment was given for malaria and anaemia. In spite of the fact that this patient came at the beginning of the fall season she responded immediately to the treatment and with the exception of two occasions during the season had no symptoms of hayfever whatever. These recurrences occurred on windy days when the pollen content in the air was considerably increased. She is now taking the continuous desensitizing treatment, and is free of symptoms.

Case No. 4. Allergic Eczema. W. C. C., age 36, occupation, Insurance Inspector. Has had eczema practically all of his life. At

times large areas, face included would be a mass of running, itching sores. Had consulted many physicians all over the country and had been advised that nothing could be done to relieve him. History of allergy; mother has hayfever and asthma. The physical examination and laboratory work disclosed no abnormalities. The basal metabolism was Minus 11. Skin tests showed a positive reaction to goose and turkey feathers, cat and dog hair, wheat, peas, beans, and a few other foods. Kapok pillows, elimination of positive foods, small doses of Thyroid Extract, and the avoidance of cats and dogs have completely relieved this patient of symptoms. This relief has continued over a period of six months, and is the longest time the patient has ever been symptom free. The ingestion of wheat or beans will cause a return of the symptoms.

Case No. 5. Allergic cough: Mrs. G. P. C., housewife, age 49, consulted us on July 19th, 1928, complaining of a distressing and almost continuous cough of four years duration. Physician consulted had been unable to find any explanation for this cough. Physical examination was essentially negative. The laboratory work disclosed Hemoglobin 76%, the presence of Estivo-autumnal malaria and a slight trace of albumin in the urine. Basal Metabolism was normal. Skin tests for bacteria, feathers and danders were all negative. The patient's history, however, suggested that she was sensitive to House Dust. A House Dust extract was prepared for her and administration gave some relief but not complete. Additional tests were done and she was found sensitive to some common grasses and ragweeds. Desensitization with the grasses and ragweed mixture combined with the House Dust extract and malaria treatment completely relieved this patient and she has been free of the cough for more than twelve months.

Summary:

Theories concerning allergy are briefly mentioned.

Skin tests and allergic study solves many perplexing medical problems.

The diagnosis or classification of allergy is of fundamental importance. Careful history

concerning inheritance, if found, and increased Eosinophiles in the blood are extremely suggestive.

Careful and complete examination including skin tests, is the Doctor's obligation, absolute cooperation is the patient's reward.

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DISCUSSION

Dr. J. Heyward Gibbes, Columbia:

The doctrine of allergy has come into prominence in relatively recent times, and the impetus behind it has been so great that the whole situation, it seems to me, is rather a mass of confusion and difficult of understanding. I feel that we are fortunate in having in this Association, and particularly in Columbia, an individual who is interesting himself in this subject; and Dr. Routh is going into it in a most thorough fashion and doing good work in it. I feel, however, that the doctrine of allergy is in the hands of enthusiasts, that it has supplanted the idea of infection, resistance, and anaphylaxis, and has gathered unto itself an attempted explanation of almost all the phenomena of disease. I find in my relations with Dr. Routh that the allergist has a plan now which is in effect, "Heads, I win; tails, you lose." I saw him in consultation over a young woman who had anginoid attacks. He sub-

mitted her to numerous tests and found her positive to various proteins. In consultation with him I found this woman had stones in the gall bladder, which were found at operation. We hoped the anginoid attacks might yield to the removal of the stones, but she continued to have her attacks. A few days afterwards Dr. Routh met me with a beaming countenance and said: "Do you know, I find in the literature that diseases of the liver are frequently the cause of allergic attacks."

Out of the maze of data, theories, and notions that are abounding today is bound to come definite information, and I feel that we in the profession should lend our support to these men.

Dr. Edward F. Parker, Charleston:

I have been very much interested in listening to Dr. Routh's paper on various allergic conditions. At the same time, it is disconcerting to know that another school of thought is now urging the theory that the hypersensitiveness of a large number of people to certain things which have no effect on others is not due to any individual or peculiar susceptibility but to a disturbance of their blood acid-base balance and that an alkalosis is the cause of the annoying symptoms. It is stated that the best way of quickly restoring the balance is to take two to three large doses of good whiskey.

Dr. Routh, Closing the discussion:

Mr. President, I thank the gentlemen for the discussion. I should like to agree with Dr. Parker in the sense that that is a very good remedy.

I was talking to Dr. Duke, of Kansas City, one of our foremost allergists, and he told me that the thing that gave more relief in these severe attacks of allergy was an ounce of whiskey and ten grains of aspirin.

Now, what Dr. Parker had to say about acidosis and alkalosis does not apply to all cases. Occasionally we find by actual gastric analysis increase of gastric acidity. In those cases the administration of alkalis helps; and in other cases, where there is low acidity, the administration of hydrochloric acid is of benefit. But what will relieve one case will not necessarily relieve another case; a complete study is always indicated.

Dr. Gibbes said this is in the hands of enthusiasts. That is true. It takes an enthusiastic man to have the patience to deal with these things, and I think that all progress in medicine begins with enthusiasm. We have many disappointments in allergy, but the thing is, that it does have a practical importance. When you can take a person who is suffering from these symptoms, with which you are all familiar, and find that that person is sensitive to some foreign protein which when eliminated gives relief, you have a patient who is truly grateful, and it is a source of gratification to know that you have done something to make that person more comfortable.

MULTIPLE MYELOMA AND DIABETES INSIPIDUS

MARK J. BACH, Milwaukee, and WILLIAM S. MIDDLETON, Madison, Wis. (Journal A. M. A., Aug. 1, 1931), report an instance of the coincidence of gross pathologic changes in the bones and diabetes insipidus. Of particular significance were the possible changes in bony structures about the sella. Whatever the interrelationship between the bony lesions and the disturbance in water metabolism, a further example is added in the case of multiple myeloma with associated diabetes insipidus.

SIGNIFICANT HEMORRHAGIC RETINAL LESIONS IN BACTERIAL ENDOCARDITIS (ROTH'S SPOTS)

WILLIAM BROWN DOHERTY and MAX TRUBEK, New York (Journal A. M. A., Aug. 1, 1931), call attention to the fact that the characteristic elliptic retinal hemorrhages with white centers occur in the bacterial endocarditides, acute and subacute, and in the severe anemias, notably pernicious anemia. The discovery of this lesion because of its significant appearance may aid in early diagnosis. The lesion occurs in both eyes, with a little greater frequency in the left eye. The lesion has little prognostic value in subacute bacterial endocarditis; in several instances it had appeared and disappeared in successive crops many months before death. The authors suggest that the designation "retinitis of endocarditis" might after further study be appropriately applied.

INTRAMUSCULAR USE OF LIVER EXTRACT

MAURICE B. STRAUSS, F. H. LASKEY TAYLOR and WILLIAM B. CASTLE, Boston (Journal A. M. A., Aug. 1, 1931), present preliminary observations from which it appears that the intramuscular use of liver extract has all the theoretical advantages of the intravenous method and is decidedly practical both from a therapeutic and from an economic standpoint. Furthermore, some patients apparently prefer to inject a small quantity of liver extract intramuscularly rather than to ingest a large quantity of liver or to take an extract by mouth which is not altogether palatable. From the preliminary observations it seems possible that the extract necessary for a week's treatment when taken by mouth may, if given by daily intramuscular injections, suffice for from five to six months. The intramuscular method may be of even greater advantage in those cases requiring unusually large doses of extract by mouth or actually a life-saving measure in severely ill patients. The adequate treatment of cord lesions requiring large amounts of liver extract may be greatly simplified by the parenteral injection of liver extract alone or as an accessory to oral therapy. The authors describe a method of preparing an extract of liver suitable for intramuscular injection and highly potent in pernicious anemia. Maximal reticulocyte responses were obtained from the daily intramuscular injection of the extract derived from 10 Gm. of liver. The potential therapeutic and economic advantages of this method are suggested.

MINUTES

REPORT OF COUNCILORS, GREENVILLE MEETING, MAY 5, 6, 7, 1931.

Report of Councilor of 1st District

The past year has been characterized by enthusiasm and harmony. The District meetings have been well attended, better than at any time in the past. The programs have been of a high order and practically all of the counties were represented.

The (Charleston County Medical Society) Medical Society of South Carolina has 91 members on roll, held 22 meetings during the year with average attendance of 54. Only 9 members who is eligible not on the roll: 4 Chiropractors, 1 Osteopath, no illegal practitioners.

The Beaufort-Jasper Society has 8 members on roll, held 2 meetings with average attendance of 7. 2 eligible men not on the roll, no chiropractors, osteopaths or illegal practitioners.

The Dorchester Society has 6 members on roll, held 4 meetings, average attendance of 5: Has 5 eligible men not on the roll, no chiropractors, osteopaths or illegal practitioners.

The Colleton County Society has 9 men on the roll, held twelve meetings with average attendance of 6. No eligible men not on the roll, no chiropractors or osteopaths, one illegal practitioner.

The Berkeley County Medical Society had recently changed officers and the former secretary had forwarded score card to new secretary whom I was unable to reach.

Respectfully submitted,
J. H. Cannon, M. D.

Report of Councilor of 2nd District

Mr. Chairman and members of the South Carolina Medical Association:

I herewith submit my annual report as counselor of the Second District, made up of the counties of Aiken, Edgefield, Lexington, Richland, and Saluda.

Aiken shows a better report this year than previously. They have twelve members, held six meetings, with an average attendance of seven. Sixteen eligibles not enrolled.

Richland, or Columbia Medical Association has one hundred and two paid members, including fourteen honorary members. Eleven regular scientific meetings were held and twelve pathological conferences, with an average attendance of thirty-five. Sixteen eligibles not enrolled.

The Ridge Association, which is composed of the counties of Edgefield, Lexington and Saluda, report twenty-six members. Six meetings we have been held with an average attendance of fifteen. Eighteen not enrolled.

The District Association meets twice a year, with very good attendance and a very good scientific program.

Respectfully submitted,
Samuel E. Harmon,
Councilor.

Report of Councilor for 3rd District

Mr. President and House of Delegates:

I hereby transmit my report of The Third District Medical Association, which is composed of Abbeville, Greenwood, Laurens and Newberry Counties. These counties are organized and for the greater part have shown regular meetings and very good attendance.

Abbeville, Greenwood and McCormick have a Tri-County organization, that no doubt, is doing good work.

Our Third District Association annual meeting was held at Abbeville last year and was a pronounced success. We will go to Newberry this year.

One thing I regret to note that we have fallen off in members since last report. I hope this may be overcome and the lost members harvested again.

Respectfully,
T. L. W. Bailey, M. D.
Councilor

Report of Councilor of 4th District

Mr. Chairman:

As Councilor of the Fourth District, I beg to submit the following report:

Score cards were received from the following counties: Anderson, Oconee, Pickens, Cherokee, Spartanburg and Greenville. No report was received from Union County. These reports set forth the following facts, which are respectfully called to the attention of the Association:

Greenville, Spartanburg, Anderson and Pickens Counties report 12 meetings each during the year; Oconee reports 4 and Cherokee reports 6 meetings in the year. No report as to activities of Union County was received.

The programs carried out in all these various Societies are instructive and of interest. The activities of the various Societies have been well kept up during the year and there have been no complaints received from any of the Societies in the past year.

The Societies have maintained their usual proportion of those eligible for membership in the Societies.

The Fourth District Society held its meeting at Spartanburg; attendance was good and several interesting and instructive papers were read.

The following Counties were visited by your Councilor during the year: Oconee, Pickens, Spartanburg and Anderson.

All of which is respectfully submitted.

R. C. Bruce, Councilor,
4th Medical District.

Report of the Councilor of 5th District

Gentlemen of the Medical Association, I have the honor to represent the Fifth District, comprising the Counties of Chester, Fairfield, Lancaster, Kershaw and York.

Am pleased to report the societies in this District to be in an even better condition than last year.

We have held two fine District meetings, one in Winnsboro, where we had as our honor guest the President, Dr. Lynch. The second meeting was held in York with the President-Elect, Dr. Mobley with us. These meetings did not have as large a number present as wished for but roads under construction prevented some from coming.

I have visited each of the societies holding regular meetings and feel as tho' I hold membership in several as I am invited to the meetings and have attended often.

Death has invaded our ranks and this Spring York County has lost two of our best men, Dr. J. Roddy Miller of Rock Hill and Dr. I. J. Campbell of Clover. In the death of Dr. Miller we have lost one of our best men. In that of Dr. Campbell a good man while more in politics than medicine, he as Senator from York County was ever ready to help organized medicine in every way.

My term expires with this meeting. It has been a pleasure to be a Councilor, to attend the meetings and help as best I could. My best wishes are for greater successes to each of you and the society.

Respectfully,
Jas. R. Des Portes, M. D.,
Councilor, Fifth District.

Annual Report of M. R. Mobley, Councilor, 6th District, South Carolina Medical Association.

Gentlemen:

Enclosed herewith are the Councilor's Score Cards for the counties comprising the Sixth District. It will be noted that there are in this District 126 physicians eligible for membership in the county Societies and of this number 88, or approximately 75%, have paid their dues and are enjoying the privilege of full membership for the current year. The majority of the remaining 38 non-members have in the past been active members of the county Societies, but due to the fact that they have not paid their dues for the current year, cannot be counted as members.

All of the counties, with the exception of Dillon, have held regular meetings during the year. Chesterfield and Marlboro Counties hold regular monthly meetings, and in addition to this Marlboro County Society holds an annual meeting and banquet, at which time a scientific program is rendered which would do credit to any state society. The average attendance upon this meeting is approximately 100, consisting of the majority of the profession in the surrounding

counties of North and South Carolina. Appearing on this program have been some of the leading physicians of the South. The profession of Marlboro County are to be congratulated upon their initiative and their gracious hospitality.

The Florence County Society has adopted the policy of holding quarterly meetings, at which time a delightful supper is served. The expense of this is defrayed from the membership dues, which are \$10.00 annually. This has served to stimulate the attendance upon the meetings and the fellowship enjoyed by the members has tended to bring them closer together.

It is to be regretted that the Little Pee Dee Medical Association, consisting of the membership of the County Societies of Dillon, Marion and Horry, no longer functions. These counties have a comparatively small membership and they conceived the idea of meeting in unison quarterly, and yet at the same time preserving their individual county societies as integral factors. Your Councilor feels that these counties would do well in reorganizing the Pee Dee Medical Association. Interest in organized medicine in one of these counties, Dillon, is at a very low ebb, evidenced by the fact that they have failed to hold a medical meeting for the past two years, at the same time, however, keeping their organization intact, having six out of the nine physicians practicing in the county on their roll.

The annual meeting of the Pee Dee District Society was held in Bennettsville in November and was attended by in excess of 100 physicians. The program under the capable leadership of the President, Dr. R. J. Coney, of Cheraw, was of a very comprehensive and highly scientific nature. Following the meeting those in attendance were entertained at dinner by the Marlboro County Medical Society.

There are 6 chiropractors in the District and one Osteopath.

While it is the privilege and pleasure of the various County Medical Societies upon occasions to entertain and hear addresses from members of the profession from distant points, still it is to be deplored that the success of the meetings is dependent upon outside sources of inspiration. In the writer's humble opinion, the success of any county society is in direct ratio to the activity of its individual members in the preparation and rendition of scientific. With the wealth of literature at the command of any physician, the writing of a scientific paper should not be a difficult task. Study stimulates interest and growth and thereby we are enabled to render a larger service to the public. On the other hand, if we neglect these opportunities our field of vision becomes narrower and we daily fail to recognize in our patients those causes which are productive of symptoms and finally find ourselves treating nothing more than symptoms.

Report of Councilor for Seventh District South Carolina Medical Association Sumter County

Members on roll 24.

Meetings during the year 10.

Average attendance—10.
 Three eligible physicians not on roll.
 One chiropractor.
 No osteopaths, no illegal practitioners.

Williamsburg County

Members on roll—10.
 Meetings during the year—5.
 Average attendance—6.
 Two eligible physicians not on roll.
 No chiropractors, no osteopaths, no illegal practitioners.
 Unable to get report from Lee, Clarendon and Georgetown Counties.

Respectfully submitted,

T. R. Littlejohn, M. D.
 Councilor Seventh District

Report of Councilor of 8th District

Mr. President and Gentlemen of the Council of The South Carolina Medical Association:

I beg to submit the following report of the Eighth District of the South Carolina Medical Association
 The Eighth Medical District comprises the following

counties: Orangeburg, Bamberg, Barnwell, Hampton and Allendale. A medical society has been organized and has been functioning in each of these counties during the past year. All of these societies have been reorganized this year except Allendale county. So far this county has not reorganized, but I feel sure that they will have a meeting at an early date.

The Eighth District Medical meeting was held in Denmark, South Carolina, on April 23, 1931. This was a well attended meeting and an excellent program was arranged. Dr. Lynch, President of the South Carolina Medical Association was present and read a very excellent paper on diagnostic procedures. The meeting was a grand success socially and each doctor seemed to enjoy this part of the meeting. Dr. J. S. Matthews of Denmark was elected president of the district society and Dr. L. P. Thackston, of Orangeburg, S. C., was elected Secretary.

One death has occurred in this district during the past year, Dr. Briggs of Blackville, S. C.

No illegal practitioners have been reported in this district during the last year.

Respectfully submitted,

G. M. Truluck, M. D.,
 Councilor

SURGERY

Wm. H. Prioleau, M.D., Charleston, S. C.

INFILTRAT ON ANESTHESIA AND ITS USE IN FRACTURES

The use of local anesthesia is rapidly extending. In some fields its application is attended with considerable technical difficulty while in many with relatively none at all. It is in these latter ones that it should be much more generally employed. We have particular reference to its use in the reduction of fractures. The subject is clearly presented by Dr. C. O. Rice in Surgery, Gynecology and Obstetrics, April 1931.

For a long time there was the opinion that injection into a fracture area would likely initiate an infection or interfere with bone healing. This idea has no sound basis and has been disproven thousands of times. Contraindications to injection are infections and compound fractures.

The technique is simple. The skin is

sterilized and from 10 to 60 cc of 1% procain are injected into the fracture gap. This region can be ascertained by withdrawing bloody fluid into the syringe. The result is relief of pain and muscle spasm, thus favoring satisfactory reduction. There is sufficient time for X-ray examination and manipulation if necessary.

It is most important that the reduction be made early, before secondary swelling has taken place. When there is much swelling the local anesthesia is not as effective. To be at all satisfactory in these cases it has to be injected into adjacent tissues as well as into the fracture gap.

Only a deep general anesthesia will give as much relief from muscle spasm. Reduction without anesthesia is often incompatible with good results. Local infiltration is simple of application and it greatly facilitates reduction. It should be more generally practiced.

SOCIETY REPORTS

PROCEEDINGS OF THE MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA HELD AT ROPER HOSPITAL, TUESDAY EVENING, JUNE 23rd, 1931, AT 8:30

The meeting of the Medical Society of South Carolina was held at Roper Hospital, Tuesday evening, June 23rd, 1931 at 8:30 with the following members present:

Doctors J. Austin Ball, M. W. Beach, T. E. Bowers, A. J. Buist, J. Walter Burn, T. H. Byrnes, F. G. Cain, J. H. Cannon, O. B. Chamberlain, H. W. de Saussure, H. P. Jackson, W. H. Johnson, K. M. Lynch, R. L. McCrady, G. McF. Mood, Kivy Pearlstine, F. Raymond Price, W. H. Price, W. H. Prioleau, J. S. Rhame, F. F. Sams, W. H. S. Speisegger, R. B. Taft and J. I. Waring.

The meeting was called to order by the President, Dr. J. Sumter Rhame. Minutes of the meeting of June 9th were read and confirmed.

Dr. G. McF. Mood, Chairman of the Board of Commissioners of Roper Hospital reported that the Board of Commissioners had decided to employ an all time roentgenologist and to open a department of X-ray and physiotherapy under the jurisdiction of the hospital. He stated that Dr. Hillyer Rudisell had been elected roentgenologist, and that the department was now open and ready for work.

Under miscellaneous business Dr. K. M. Lynch moved to reconsider the action of the Society in accepting the resignations of Doctors Wagener and Wellbrook. This motion was seconded and carried. Dr. Lynch then moved that the previous action be rescinded and that Doctors Wagener and Wellbrook be reinstated as members of the Society in accordance with the recently changed by-laws in regard to out-of-state membership. This was seconded and carried.

The acting secretary read the following letter from Dr. W. G. Gamble, Jr.:

"I was informed the other day by the American Medical Association that I had been dropped from the rolls of the S. C. Medical Society for the non-payment of dues. I know this is entirely my fault and I have no excuse to offer except for the fact that I have shifted around so much and trying hard to make a living since leaving Charleston.

However for sentimental reason and also due to the fact that I am not yet what you might call permanently or definitely located, I wish to retain my membership. So will you oblige me by making a sight draft on the undersigned, Bay City Bank, Bay City, Michigan, for my dues? Or if you prefer write me of the amount and I will send you a check.

Kindly excuse this neglectfulness and oversight on my part and with best regards to all, I am

Very respectfully yours,

(Signed) W. G. Gamble, Jr."

On motion duly seconded and carried, the secretary was directed to write Dr. Gamble and request him to reapply for membership, explaining to him the by-laws governing his status.

The acting secretary read the following letter from Mr. C. W. Miller, Director, Bureau of Vital Statistics, State Board of Health, Columbia, S. C.

"I will be obliged, if at the next meeting of your Society, you will call to the attention of the Physicians the decrease in births for the past five months in Charleston, City.

There is a decrease in May alone of thirty-three and a third percent and for the five months of this year we are 73 live births short. As you well know, Infant Mortality is computed by the number of births and if the births are not returned, Infant Mortality of your City will be very high.

I do not know if this decrease is an actual one or caused by the Physicians' and Midwives' not reporting and holding back their certificates. I have written to the Health Officer of Charleston, Dr. Leon Banov, calling his attention to the injury that will be done to Charleston by showing an extremely high Infant Mortality.

Very truly yours,

(Signed:) C. W. Miller, Director."

This letter was received as information.

The scientific meeting was called at 9 P. M.

Dr. A. T. Moore of Columbia, S. C., presented an interesting series of X-ray films on various types of vertebrae and hip joint diseases and illustrating operations performed on certain of these cases. Discussed by Dr. Prioleau closed by Dr. Moore.

Dr. J. I. Waring reported a case of milk-sensitivity. Discussed by Dr. Mood.

Dr. A. J. Buist reported on two cases—

First: Torsion of the Spermatic Cord;

Second: Krukenburg Tumor of Ovary.

These were discussed by Dr. K. M. Lynch.

There being no further business the meeting adjourned.

Respectfully submitted,

W. Atmar Smith, Secretary.

ANDERSON COUNTY MEDICAL SOCIETY MEETING HELD JUNE 8, 1931.

The regular monthly meeting of Anderson County Medical Society was held at John C. Calhoun Hotel, Monday, June 8, 1931, at 8 P. M. The President and Vice-President being absent the Secretary, Dr. D. J. Barton, presided over this meeting.

The minutes of the meeting of May 11th were read and approved.

Under the head of business, Dr. Thos. R. Gaines made motion that Medical Society extend vote of thanks to Publicity Committee for Health articles

they have prepared and submitted to County papers for publication, motion seconded and carried.

Dr. J. B. Latimer's time having expired a chairman of Public Health Committee, Dr. W. B. McWhorter was nominated and elected to serve one year on this committee—Dr. J. M. Hobson to serve as chairman for the ensuing year.

Dr. J. B. Latimer made motion that flowers and note of good cheer be sent Dr. J. O. Sanders, who is quite ill at this time, motion seconded and carried.

Dr. S. C. Dean made motion that the president appoint a committee of five at the next meeting of

Society on "Cancer". This committee to prepare and present program to Society once yearly. Motion seconded and passed.

Dr. Frank Wrenn had charge of the Scientific Program—His subject being "Cancer," this was a very interesting paper. Dr. Wrenn stressed the importance of an early diagnosis of Cancer. The following joined in the discussion: Drs. J. N. Land, S. C. Dean, J. B. Townsend, and H. W. Corbett.

Members present—Eighteen.

Refreshments were served.

D. J. Barton, M. D., Secretary.

BOOK REVIEWS

DIETETICS AND NUTRITION, By Maude A. Perry, B. S., Formerly Director of Dietetics at the Michael Reese Hospital, Chicago, and at the Montreal General Hospital, Montreal, Canada.

The author presents scientific and technical material in the field of dietetics and nutrition in plain and simple language to meet the needs of schools, training schools for nurses, graduate nurses, physicians, teachers, and all others interested in personal and public health problems.

The material in this book has been derived from many sources. Much has been taken from the ripe experience of the author covering a long period of years in writing, lecturing, in hospital and university work, and in feeding both sick and well people. The literature of the world has been combed for the best in dietetics and nutrition. The C. V. Mosby Company, publishers. 3523-25 Pine Boulevard, St. Louis, U. S. A.

EASIER MOTHERHOOD, By Constance L. Todd,
"For all those people, both men and women of the lay and the medical worlds, who believe that all needless suffering is monstrous and that upon an advancing civilization is laid a definite obligation to abolish it, whatever the cause, this handbook may serve as a weapon, an implement to their hand, not by virtue of opinion but of accumulated facts. It is specifically offered to those young women of today who are destined to bear the next generation, and to the husbands, mothers, relatives and friends who hold them dear. It is written in the hope that it may bring them aid for their immediate needs; and, since a dread of pain indicates neither cowardice nor lack of character nor selfishness, but rather imagination and sensitiveness, it may perhaps serve to enlist a certain number of these women in the battle for the release of other women." Price, \$2.00. The John Day Company, Inc., publishers, 386 Fourth Avenue, New York City.

SURGICAL CLINICS OF NORTH AMERICA.
(Issued serially, one number every other month.)

Volume 11, number 2. (Lahey Clinic Number—April 1931) 248 pages with 88 illustrations. Per clinic year (February 1931 to December 1931.) Paper, \$12.00; Cloth, \$16.00. Philadelphia and London.

THE MEDICAL CLINICS OF NORTH AMERICA.
(Issued Serially, one number every other month.) Volume 15, Number 1. (Mayo Clinic Number—July 1931). Octavo of 263 pages with 56 illustrations. Per Clinic Year, July 1931 to May 1932. Paper, \$12.00; Cloth, \$16.00 net. Philadelphia and London. W. B. Saunders Company, 1931.

THE MEDICAL CLINICS OF NORTH AMERICA.
(Issued Serially, one number every other month.) Volume 14, Number 6, and INDEX VOLUME. (New York Number—May 1931). Octavo of 300 pages with 55 illustrations. Per clinic year, July 1930 to May 1931. Paper, \$12.00; Cloth, \$16.00 net. Philadelphia and London; W. B. Saunders Company, 1931.

CLINICAL DIETETICS, a Textbook for Physicians, Students and Dieticians By Harry Gauss, M. S., M. D., F. A. C. P., Instructor in Medicine, University of Colorado, School of Medicine. Assisted by E. V. Gauss, B. A., Formerly Assistant Dietitian, Presbyterian Hospital, Denver, Colorado. Illustrated. St. Louis, The C. V. Mosby Company, 1931.

AN INTRODUCTION TO GYNECOLOGY, By C. Jeff Miller, M. D., Professor of Gynecology, Tulane University School of Medicine; Chief of the Department of Gynecology of Touro Infirmary; Senior Visiting Surgeon, Charity Hospital, New Orleans. Illustrated. St. Louis, The C. V. Mosby Company, 1931.

HARPER'S MEDICAL MONOGRAPHS—The Treatment of Injury by the General Practitioner. By Clay Ray Murray, M. D., F. A. C. S., Assistant Professor of Surgery, College of Physicians and

Surgeons. In this book Dr. Murray has made available the benefit of a large experience in this type of work. It is a detailed presentation of what might be called, as he calls it, "the surgery of necessity," and since in the great majority of instances patients suffering from injury are first seen by the general practitioner, it is the man in general practice who will most benefit by the book. It emphasizes the importance of contusions, which are too often neglected as minor injuries of little importance; discusses thoroughly the important subject of burns and is naturally devoted in large part to the treatment of fractures and dislocations. Throughout there is comparatively little space given to the subject of diagnosis, since that is relatively simple in these conditions, but the bulk of the book is devoted to the treatment with the object of getting the patient, "back to work or to play as soon as possible and, as nearly as possible, just as he was before he was hurt." Emphasis is constantly laid upon the need for adapting the treatment to the patient and his needs rather than the development of an "ideal" method of treatment. The section of patient psychology is particularly important, while the chapter on the general principles of the treatment of fractures is worth the consideration of any surgeon.

This work is particularly adapted to fill the needs of the industrial surgeon who will find in it all that he needs to know about the treatment of injury. Particular stress is laid upon the importance of calling in the expert when the case demands resources of skill, assistance and equipment beyond those at the command of the physician who first sees the patient. The reader is impressed with the large element of common sense which pervades the book and this, together

with the knowledge of the large experience of the author, gives a feeling of confidence in spite of the fact that he does not always adhere to the conventional methods of treatment that have been followed for years.

The text is everywhere supplemented and clarified by the generous use of drawings by the author. These serve as graphic additions to the textual description and should prove particularly helpful. Wherever a physician numbers the injured among his patients he will find this book useful and a valuable aid. Two volumes, \$5.00. Harper and Brothers, 49 East Thirty-Third Street, New York, N. Y.

THE MEDICAL CLINICS OF NORTH AMERICA.

(Issued Serially, one number every other month.) Volume 14, Number 5. (Chicago Number—March 1931) Octavo of 255 pages with 21 illustrations. Per Clinic year, July 1930 to May 1931. Paper, \$12.00; Cloth, \$16.00. net Philadelphia and London. W. B. Saunders Company, 1931.

THE SURGICAL CLINICS OF NORTH AMERICA.

(Issued serially, one number every other month.) Volume 11, No. 1. (Chicago number—February 1931.) 225 pages with 72 illustrations. Per clinic year (February 1931 to December 1931.) Paper, \$12.00; Cloth, \$16.00. Philadelphia and London. W. B. Saunders Company, 1931.

FERTILITY AND STERILITY IN HUMAN MARRIAGES.

By Edward Reynolds, M. D., Boston, Mass., and Donald Macomber, M. D., Boston Mass. With a section on, the Determining Causes of Male Sterility, by Edward L. Young, Jr., M. D., Boston, Mass. Octavo volume of 285 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1924. Cloth, \$5.00 net.

RECENT FACTS ON THE TRANSMISSION OF TUBERCULOSIS

J. ARTHUR MYERS, Minneapolis (Journal A. M. A., Aug. 1, 1931), deprecates the fact that students of medicine and nursing are being left with the impression that it is a good thing to come in contact with patients suffering from tuberculosis and receive just the right dose to give them a positive tuberculin reaction. Under such conditions the dosage is entirely uncontrolled. The number of bacilli which the student's body receives from contact with tuberculous patients may vary from a few to huge numbers. Where careful observations have been made in this country, it has been shown that approximately 30 per cent of the probationers in schools of nursing react positively to the tuberculin test but, after they have taken tuberculosis services, from 80 to 100 per cent have been found to react positively. Since a positive reaction indicates an allergic state and since there is reason to believe that the destructive phase of tuberculosis is brought about by the allergic reaction, it would seem obvious that nothing but harm has been done by allowing

students to take unmeasured doses of tubercle bacilli into their bodies and develop a state of allergy. But what immediate evidence is there that allergy is dangerous to the students? The best evidence is that from 5 to 12 per cent of student nurses have presented themselves with tuberculous disease that required treatment soon after allergy was manifested by a positive tuberculin reaction. Pleurisy with effusion is looked on as one of the early manifestations of tuberculosis. In itself, it is an allergic reaction. Many patients are desperately ill from it over a considerable period of time. Abundant clinical experience has taught that pleurisy with effusion is frequently followed by pulmonary tuberculosis of the destructive type. Therefore, in the light of such evidence, who will dare state that an allergic reaction, as manifested by the tuberculin test and brought about by exposure to human beings suffering from tuberculosis, is of benefit to a student? The author desires to leave the answer to the reader and to the students themselves as to whether exposure of students to tuberculous patients should be allowed to continue or whether it should be prevented by the adoption of an adequate contagious technic.

COLUMBIA MEDICAL SOCIETY

Meeting called to order by the President Dr. James S. Fouche,, Medical Society Hall June 8, 1951.

Minutes of last scientific meeting read and adopted.

No clinical reports. The president recognized and extended the floor to them.

The first paper of the evening as a cross section of surgical practice and illustrations with lantern slides by LeGrand Guerry. His talk was particularly in reference to appendicitis and the outcome of his cases. He emphasized the point to choose the proper time to operate on any surgical case. The paper was discussed by Dr. Doughty, Dr. Taylor, Dr. Bunch and Dr. Seibels.

The second paper of the evening was Traumatic Perefpheral Neuritis and illustration with lantern slides and moving pictures by Dr. J. Heyward Gibbes. This was a very interesting and instructive talk with moving pictures of a man who had a traumatic injury to the long thoracic nerve. Discussed by Dr. Saye, Dr. Bunch, Dr. Zemp and closed by Dr. Seibels.

The president announced the next program: Dr. Hugh Smith of Greenville and Dr. Frank Durham. There were 44 members present and 7 visitors including Drs. Carl West and Rhame of Camden and Dr. Moore of Newberry County, Miss Edith Robinson, student at Johns Hopkins and Mr. Richard Josey, student at the S. C. Medical College.

Society adjourned at 10:20 P. M.

Respectfully submitted,
William Weston, Jr.
Secretary.

PSYCHO-CHEMISTRY: SOME PHYSICO-CHEMICAL FACTORS IN MENTAL DISORDERS

WALTER FREEMAN, Washington, D. C. (Journal A. M. A., Aug. 1, 1951), states that the application of another of the fundamental sciences to the study of behavior, namely biochemistry, is being witnessed today, and the designation psychochemistry is the natural result. Advances in a science emanate from those who, already versed in two different disciplines, work in the field of knowledge lying between them. Mere collaboration of two different experts will not be so productive, since neither can be completely in sympathy with the point of view of the other. Few biochemists are versed in psychiatry, however, and few psychiatrists have more than a bowing acquaintance with such terms as colloidal dispersion, interfaces, ionic dissociation and oxidation-reduction. Psychochemists, therefore, will be grounded in biochemistry as well as in psychiatry and will investigate the problems of normal and abnormal behavior from the standpoint of altered chemical reactions in that master tissue of the body, the central nervous system. The failure of microscopy to demonstrate structural alterations in the so-called functional psychoses is driving the investigator into new channels of research. The results of this activity are just beginning to appear and will grow tremendously in volume. What future accomplishments may be witnessed are beyond human power to

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foretell. Dementia praecox, manic-depressive psychosis, paranoia, epilepsy represent four groups of disorders that rest on no constant well defined alteration in the histology of the nervous system. None can doubt, however, that there exists an underlying structural deviation, provided such a definition is pushed to its logical limits to include molecular and ionic imbalances. Probably the changes are much more gross than that and will be readily demonstrable when proper methods are applied. Such work as that already performed is sufficient to enable one to erect hypotheses concerning the probable underlying physicochemical mechanisms concerned in some of these major abnormalities. Most clearly indicated is the role of water balance in epilepsy, although this also involves such mechanisms as hydron concentration, oxidation-reduction and salt equilibrium. Moreover, the role of defective oxidation in the nervous system in schizophrenia also rests on considerable evidence, and the striking parallels, from the chemical standpoint, between the phases of manic-depressive psychosis and the hibernation cycle of certain mammals, point to some phasic alteration in colloidal dispersion and electric potential. In view of its newness the author makes a survey of the field, and the possibilities of its further development. He emphasizes that there are certain biochemical processes associated with disorders, of behavior and that if one is equipped with a knowledge of their workings one may be able, by supplying deficiencies by preventing excesses, by controlling periodic shifts in various equilibria, to bring about artificially conditions that approach the normal. The psychochemist has a large order.

MECHANISM OF EDEMA IN RELATION TO CLINICAL CLASSIFICATION OF BRIGHT'S DISEASE (NEPHRITIS)

HENRY A. CHRISTIAN, Boston (Journal A. M. A., Aug. 1, 1931), has found edema a very useful basis of classification of Bright's Disease along with a time division into acute, subacute and chronic. Using these criteria he has formed a clinical classification that has been very helpful. Properly to apply edema as one of the criteria of classification of Bright's Disease or nephritis necessitates a reasonable understanding of the pathologic physiology of edema, and although the mechanism of edema is very complex and as yet far from thoroughly understood, recent investigation carried on in many different laboratories has added much to the knowledge of it, so that one is in a position so to formulate this knowledge as to aid in an understanding of the several types of Bright's disease. It is obvious that edema or the appearance of abnormal amounts of fluid in tissues and body cavities does not arise from the same cause or, so to speak, does not always have the same mechanism. This permits one to subdivide edema into seven clinical varieties: cardiac, hepatic, renal, nutritional, anemic, inflammatory, and anaphylactic edema. Of these varieties of edema, cardiac and hepatic edema have a very similar mechanism; in the same way renal, nutritional and anemic edemas are closely related as are inflam-

matory and anaphylactic edemas. In the mechanism of these several varieties of edema there are concerned six significant factors: filtration pressure, osmotic pressure, permeability of vessel wall, salt content of the tissues, lymphatic drainage and nervous control. The exact part played by each factor is not fully understood as yet, and, when they act in various combinations, great complexity may enter into the process. However, a reasonable understanding of the mechanism of edema may be obtained by analysis of the action of some of these factors in a somewhat schematic way. This relatively simple clinical classification is a practical easily applied and useful grouping of patients with Bright's disease. Almost every patient can be placed properly in the classification after relatively simple clinical study. Hence the author commends its use.

UNUSUAL SKIN REACTION TO EPINEPHRINE

According to R. W. LAMSON and S. O. CHAMBERS, Los Angeles (Journal A. M. A., Aug. 1, 1931), the subcutaneous administration of epinephrine may be attended with certain protracted or even permanent manifestations. In one patient observed by them so small a dose as 0.2 cc. caused a definite anemia of the skin in an area of at least 3 cm. in diameter. This anemic area was observed more than six hours after the injection, and somewhat larger doses have prolonged such manifestations for a period of from twenty-four to thirty-six hours. In spite of such protracted action with accompanying anemia of the skin, no permanent change was observed. The skin immediately around the site of the injection shows marked atrophy suggesting the appearance of the foveated scar which follows a "primary" vaccine virus reaction. These unusual reactions may represent a local hypersensitivity or idiosyncrasy to the drug, but they have not been accompanied by any untoward systemic responses.

DRUG ADDICTS

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The Journal

of the

South Carolina Medical Association

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The Journal

OF THE

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EDITORIAL

The time of year has arrived for greater activity in the medical society. The Secretary is the one man whose leadership always makes for or against the progressive society. We have a good many Secretaries in this State who have demonstrated their peculiar fitness for the office and their societies are always well attended and the programs keenly interesting. Without intending any invidious comparisons the following Secretaries deserve continued support by the members of their respective organizations: Dr. A. T. Moore of Columbia, is the wide awake Secretary of the Second District and we urge our readers to turn to his minutes for a confirmation of this opinion. When we say this we wish to emphasize that the Minutes of the Second District constitute a miniature post graduate course. There is another Secretary whose minutes are unusually instructive, Dr. W. Atmar Smith, Secretary of the Charleston Society. We are glad to note that the Columbia Medical Society proposes to look into the matter of employing a stenographer to report their meetings. Dr. William Weston,

Jr., gives a good write-up of their doings but a stenographic report should add tremendously to the interests of the largest medical society in the State. The Anderson Society with Dr. J. D. Barton at the helm as Secretary gives a good account of itself at every meeting and the same may be said of Greenville and Spartanburg whose Secretaries are Dr. J. D. Parker and Dr. W. M. Sheridan, respectively.

The big societies do not deserve all the praise. We wish to call particular attention to the good work of Ex-President of the State Medical Association, Dr. W. P. Timmerman of Batesburg, Secretary of the Ridge Medical Society. Take a look at his Minutes in another part of this journal. They show a well rounded program according to our idea of such. They have some interesting clinical cases at practically every meeting to talk about with the patients frequently presented. Then they have a visitor or two but it is notable that the visitors are never permitted to be the whole show so to speak. The Woman's Auxiliary of the Ridge Medical Society is a flourishing or-

ganization and cooperates most cordially with the medical men there. They are taking great interest in not only the social features of the County Medical Society but the historical records of medical men in their respective communities. Ex-President of the State Medical Association, Dr. H. L. Shaw of Sumter, is a splendid County Secretary, always loyal and enthusiastic. Once a year Dr. D. D. Strauss, Secretary of the Marlboro Society puts on one of the most extraordinary programs in the Southern States.

There are many other good Secretaries who quietly go about their work with marked success, especially in many of the smaller county units.

We would not give all the glory to the Secretary. The President has an important place in the official family and often he is an inspiration, not only to his Secretary but to the membership as well. The team-work of the two is much to be desired if every interest of the Society is to be conserved.

We are looking forward to the greatest scientific treat in our Society meetings for several years. Somehow the financial depression seems to have been a stimulant to medical organizations throughout the country rather than otherwise.

The Councilors of the South Carolina Medical Association render a distinguished and unselfish service to the profession. We are peculiarly fortunate in the personnel of the Council at the present time. The majority of them are in the prime of their professional activity, keenly alive to the demands of modern organized medicine. They are anxious to visit the County Societies in their respective Districts and should be invited frequently by them. We have observed many meetings given over largely to the official visit of the Councilor and almost without exception the program was well worthwhile. The officers of constituent societies in planning their programs the coming year should set apart at least one meeting in which to honor the official visit of the Councilor and give him all the time he needs to discharge his official duties. It may be well to give the names of the Councilors just here. Dr. Sam Harmon of Columbia, has been the Chair-

man of the Council for many years and presides over the Second District. The doctor is jealous of the honor and integrity of South Carolina medicine. He is always promptly approachable for information and advice from any source. He is willing to go anywhere in the State and meet with County and District Societies to confer with them whenever desired. The officers of constituent societies may well include the Chairman of the Council in making out their official programs for the coming year. The names of the other members are Dr. J. H. Cannon, Charleston, First District; Dr. J. E. Pressley, Abbeville, Third District; Dr. R. C. Bruce, Greenville, Fourth District; Dr. J. R. DesPortes, Fort Mill, Fifth District; Dr. M. R. Mobley, Florence, Sixth District; Dr. T. R. Littlejohn, Sumter, Seventh District; Dr. G. M. Truluck, Orangeburg, Eighth District.

The amendment to the Constitution two years ago providing for a President Elect of the State Medical Association is now in full force and working admirably. The President, Dr. Charles Mobley of Orangeburg, is being assisted in a wonderful way by President Elect J. R. Young of Anderson. Both of these officers are visiting County and District Societies systematically and delivering addresses before them largely on the benefits of organized medicine. They are glad to receive invitations and as far as possible will comply with requests.

The Third District Medical Society, we understand, meets at Greenwood sometime in October under the general guidance of Dr. Buck Pressley of Abbeville, the new Councilor of that District. Dr. Pressley has announced that his goal is for one hundred per cent membership in the counties in his jurisdiction. The Third District has been notable for its splendid meetings during the long tenure of office of Dr. T. L. W. Bailey of Clinton. Dr. Bailey served, perhaps, longer as Councilor than anyone else in the State with one or two exceptions.

The American Association for the Study of Goiter request us to assist in giving wide pub-

licity to the following information:

GOITER CLASSIFICATION AND NOMENCLATURE

Clinical Classification:

Type 1—Non-toxic Diffuse Goiter.

Type 2—Toxic Diffuse Goiter.

Type 3—Non-toxic Nodular Goiter.

Type 4—Toxic Nodular Goiter.

Nomenclature:

Our association advocates a policy of using the simplest and yet the most descriptive terminology possible.

The use of proper names, while it is impossible to dispense with many well established ones in goiter literature, be discouraged; as should coined words invented to popularize a fad or fancy.

Emphasis should be made upon importance of not confounding varieties and sequelae with types. The use of such terms as exophthalmic, hemorrhagic, cystic, adolescent, colloid, intrathoracic, substernal and congenital are perfectly proper when used to describe varieties, but only constant characteristics should be used to designate types.

Dr. Julian P. Price of Florence has written a book which we are glad to call attention to in the Book Review Department of this issue of the Journal. We requested a Pediatrician and an Internist to contribute these reviews. We are glad to acknowledge promptly all books published by members of the South Carolina Medical Association and to encourage such efforts.

The meeting of the Fourth District Medical Association held at Anderson on September 8, has, perhaps, never been surpassed in point of attendance and we believe never equalled, the attendance being about one hundred and twenty. The program was replete with keen scientific interest. The hospitality of the Anderson Society is proverbial. The dinner left nothing to be desired. The retiring Officers, Dr. W. M. Sheridan of Spartanburg, President and the Secretary, Dr. George Thompson of Inman deserve great credit for their untiring efforts in bringing about such a remarkably successful meeting.

PRESIDENT'S PAGE

By Charles A. Mobley, M. D., Orangeburg, S. C.

THE CONSERVATION OF HUMAN LIFE NUMBER 2. MALIGNANT DISEASE

There is probably no problem before the race of mankind that is more serious than malignant disease. When we sit down and seriously consider the situation we realize that the problems of the moment, such as the financial depression and social unrest, are really not such great problems by comparison. Financial depressions tend to right themselves but the march of malignant disease is straight ahead.

We know many facts about this condition and have been able to improve our results in its treatment, but still other facts continue to escape us leaving us woefully weak in our defense against this invader.

The fact of paramount importance that we do know is that our best chance to aid our patients is by early recognition of the pre-malignant or beginning malignant condition. At this time our percentage of cures should be very high.

Much has been accomplished by the teaching of the public that they should come to their physician with every suspicious lesion. This should continue to be stressed. Too many people still hang back from an examination dreading to hear the word, "Cancer." But these must be taught that early recognition is their salvation.

In closing let me make the following plea: Let us use the vaginal speculum and examine the cervix of every woman over thirty that consults us when there is any possibility that cervical disease exists, and secondly, let us not figure that we have given a patient a square deal that consults us for a physical examination until a careful rectal examination has been made.

Cancer can be cured before metastasis has taken place.

ORIGINAL ARTICLES

UTERINE HEMORRHAGE

By J. Decherd Guess, B. S., M. D., Greenville, S. C.

Uterine hemorrhage may arise from a variety of different causes. In this discussion no consideration will be given to hemorrhage dependent upon recent pregnancy. Hemorrhage dependent upon constitutional conditions and that dependent upon grossly recognizable pathology will receive scant mention. It is concerning so-called fundamental, functional or diopathic hemorrhages that I shall devote most of the space allotted me.

The last chapter of uterine hemorrhage has yet to be written. When one looks over the mass of recent literature bearing on this subject one realizes that a great amount of study is being given to this problem. It will be possible for me to only touch upon this question of such great magnitude.

There are many constitutional conditions which affect and bring about disturbance of the menstrual function, and a frequent expression of this disturbance is excessive bleeding. Most noteworthy of these are the purpuras, hemophilia, and influenza. Purpura is so frequently a cause of uterine bleeding near puberty that in every case, where no other cause of bleeding is recognized, a careful examination of the blood should be made by a hematologist. Chronic intoxications, organic disease associated with hypertension and evidences of cardiovascular changes, syphilis, early tuberculosis of the lungs, leukemia and emotional stresses in those with unstable mental equilibrium are all likely to be associated with menorrhagia. In chlorosis severe menorrhagia may occur and this condition should not be overlooked as a possible cause.

Malignant changes in the uterus, either in the corpus or in the cervix, may be responsible for most severe hemorrhage. These severe

hemorrhages occur late in the disease after there has occurred extensive necrosis. However, early in the disease there is likely to be slight and intermittent bleeding, and, perhaps, only an occasional spotting after coitus, straining at stool, or straining in other ways. This bleeding is most likely to occur early in carcinoma of the cervix but occurs later in carcinoma of the body. The diagnosis of adenocarcinoma of the cervix, the most malignant and least frequent of all uterine cancers, may be difficult. It frequently begins within the cervical canal. Carcinoma of the uterus as a cause of uterine bleeding, either profuse or scanty, should be constantly borne in mind, and particularly in women in the fourth and fifth decades should this as a cause of the hemorrhage be excluded.

Non malignant uterine tumors cause at times bleeding from the uterus. The most important symptom of myoma and adenomyoma is hemorrhage, which is usually a menorrhagia, with an increase in both the amount and the duration of the bleeding. The influence of myomata upon menstruation depends upon their size and position, and the bleeding caused by them depends both upon congestion of the endometrial venous plexus from which normal menstrual blood emanates and even more upon loss of efficiency of the uterine muscle. It is those tumors which tend to encroach upon the uterine cavity which are most likely to be a cause of bleeding. The adenyomata usually cause very profuse and prolonged menstruation but usually do not cause intermenstrual bleeding. The diagnosis may be somewhat difficult because of the fact that curettage usually yields normal endometrium. These tumors may cause the uterus to increase to twice its normal size, and it usually tends to become adherent to surrounding structures. The treatment of these non-malignant uterine tumors is either surgical or by irradiation.

Adenexal diseases as a cause of uterine bleeding should be recognized. Ovarian cancer is an occasional cause, and it should be

*Read before the Greenville Medical Club, January 15, 1951.

thought of particularly in connection with post-menopausal bleeding. Although they are rare, tumors of the tube are usually associated with uterine hemorrhage. The influence of other ovarian tumors on menstruation is variable. Graafian follicle and corpus luteum cysts are never large and seem to exert little influence. Cystadenoma, or multilocular cysts, and papillomatous cysts, including dermoids, exert an influence depending upon their size and whether they are unilateral or bilateral and upon the amount of normal ovarian tissue left. Ovarian solid tumors have no characteristic effect although they may be accompanied by excessive bleeding. In pelvic inflammatory disease whether or not uterine bleeding occurs seems to depend upon whether or not the ovary is involved in the process.

Uterine polypi, whether cervical or corporeal, have as their characteristic symptom uterine hemorrhage. The cervical polypi usually cause an increase in menstrual bleeding, which may be scanty or which may be more profuse. They occur at all ages but are more frequent after thirty and the bleeding induced is like that caused by cancer and a differential diagnosis is indicated. Such a diagnosis usually causes no difficulty, because the polyp is usually easily recognized.

Corporeal polypi may involve the entire endometrium, and although they may be responsible for a severe menorrhagia they usually do not cause a metrorrhagia. Their diagnosis is more difficult in that an intra uterine examination with the curet or with forceps is necessary for their recognition.

Pedunculated myomata may give rise to hemorrhage in a manner similar to that of sub-mucous myomata by interference with uterine contraction, or they may bleed as a result of necrosis.

Hunner reports the cure of a number of cases of menorrhagia which were associated with stricture of the ureter, the cure resulting from dilatation of the stricture. He states that ureteral stricture with its damage to renal function and consequent toxemia with its influence on mental, nervous, gastrointestinal, and other functions, is one of the most fertile causes of menorrhagia and that cure is brought about by improvement of general health con-

sequent upon dilatation of the stricture.

We now come to a consideration of the most interesting of the various uterine hemorrhages. This group is referred to as functional menorrhagia, hemorrhages due to endometrial hyperplasia, idiopathic hemorrhage, fundamental bleeding, or internal secretory hemorrhage. I am not convinced that this is a very compact group. However, even though there may be sub-types, all have one important feature in common. In none of them can there be found by examination or gross inspection a lesion of the pelvic organs which would of itself explain the hemorrhages. These cases include those hemorrhages seen so frequently in young women at or near puberty and those hemorrhages which occur shortly before the menopause. With this marked difference in age incidence one might expect a great difference in etiology. However, this does not seem to be the case, and the reason is that at both of these ages there is a marked disturbance in the endocrine secretory balance. That these hemorrhages are associated with and are due to endocrine dysfunction seems to be well established and has given rise to the term internal secretory uterine hemorrhage. This endocrine dysfunction appears to find its ultimate expression in ovarian disturbance, and it is here that evidence of its presence can be demonstrated.

With the recent tremendous evolution of knowledge concerning endocrine physiology and particularly ovarian physiology and with the accompanying widespread interest in the various clinical applications of this new physiology it is reasonable to find the literature packed with material bearing on this subject, and since the newer knowledge is far from complete one need not be surprised when he finds variance in the opinion expressed in the literature. To the student of the literature the problem is made, perhaps, unnecessarily complicated by reason of the fact that many of the current text books still carry statements that are no longer believed even by their authors and statements that are contradicted in other portions of the literature. I have tried to work out in my own mind a reasonable attitude towards this group of cases and this is what I shall attempt to present.

The chief symptom whether in early womanhood or in the fourth decade is a prolongation of menstruation with a more profuse flow. There may be an alteration in the cycle with one or more skipped periods or a lessened or a lengthened interval, but there is no true metrorrhagia. Physical examination yields negative findings with the exception that in older cases there may be a slight enlargement of the uterus. Curettment yields in most cases a characteristically thickened, hyperemic, hyperplastic endometrium—hence the term hemorrhages of endometrial hyperplasia. However, there occurs in this group an occasional case in which the endometrium is approximately normal or in which it is very scanty. In reviewing curettings from young girls with menorrhagia, Burnam was surprised to find almost two-thirds without hyperplastic or polypoid endometrium. On the other hand, we know that endometrial hyperplasia is by no means always associated with menorrhagia. Facts like these account for one of the difficulties encountered in studying this group of cases.

Some of the older ideas that now appear to be discounted are that the hemorrhage is due to insufficiency of the myometrium because of fibrous tissue replacement, that is the old "Fibrosis Uteri"; that the hemorrhage is due to arterial changes in the uterine wall, "Appoplexy of the uterus"; that the hemorrhage is due to chronic endometritis; and finally that hemorrhage is a manifestation of a purely local disease of the endometrium. That there is an endocrine disturbance and that this endocrine disturbance is responsible for the bleeding seems to be generally accepted.

To understand the modern concept of this type of bleeding it is necessary to recall the normal menstrual cycle. During the active bleeding, or secretory, stage which lasts about five days the superficial endometrial epithelium is cast off. This is followed by an endometrial reparative and resting stage during which time there is in the ovary a follicle which is rapidly ripening. This stage lasts about five days and is terminated by ovulation. There now develops in the ovary a corpus luteum which continues to be present for a second fourteen days and exerts

a control over the endometrium causing it to undergo a rapid hyperplasia and development. After about fourteen days the corpus luteum undergoes degeneration, and there follows the endometrial secretory stage and the appearance of the menstrual flow.

Short menstrual intervals appear to be signs of disturbed maturation of the ovum, usually together with incomplete maturation and subsequent deficient corpus luteum formation. Novak states that functional menorrhagia is most frequent near the menopause, but that about 5% occur near puberty. He states further that it is presumably of purely follicular origin with one or more unruptured ripe follicles, and its excessiveness is presumably due to absence of corpus luteum which normally inhibits further maturation of unruptured follicles. Adler thinks that the uterine bleeding is due to over-function of the ovary, but I believe that this opinion is not accepted, the stress being laid on dysfunction. It is hard to reconcile the fact that the bleeding is cyclical thus suggesting corpus luteum influence, while at the same time the endometrium is noncyclical and constant, thus suggesting absence of corpus luteum.

The endometrium is a creature of the ovary. Cyclic changes of menstruation depend upon the ovary. If the ovary is disordered these changes will also be disordered. It is only during the period of ovarian activity that this type of bleeding occurs. This type of hemorrhage is not usually cured by curettage, thereby indicating that it is not simply a local condition of the endometrium. After curettment the endometrium reforms hyperplastically.

There is present in the endometrium an anti-coagulation factor, which by its action increases the tendency to bleeding. Novak believes this substance is formed in the ovaries and excreted in the endometrium and that in functional hemorrhage there is probably an over production of it. On the other hand, Graves doubts that ovarian secretion has any effect upon uterine bleeding, while Frank found two types of functional bleeding, one with over and one with under secretion of the sex hormone described by him.

Perhaps, the most interesting work done in an effort to tie up ovarian pathology by way of its physiology with functional uterine

hemorrhage has recently been reported by Shaw in the *Journal of Obstetrics and Gynecology of the British Empire*. Shaw made a careful correlative study of clinical history, physical findings, and ovarian histo-pathology in a relatively large group of cases, and then attempted to divide them into related groups. In this way he formed five characteristic groups of essential uterine hemorrhage.

Shaw's first group corresponds with Schroder's metropathia hemorrhagica. It constituted 26½% of his cases. These were between 40 and 50 years of age and had a history of normal menstrual cycles in which there occurred a suddenly skipped period. The next period began normally but bleeding continued for a period of from three to eight weeks. Less characteristically there were cases with a succession of profuse and prolonged periods with a normal period intervening. The uterus was normal in size or was, perhaps, slightly enlarged. There was a slight enlargement of one or both ovaries. On curettement the endometrium was found to be thick, dark red, and polypoid and its basal layer was hyperplastic. One, or both ovaries, was found to contain a follicle cyst, one to one and a half inches in diameter. This represents a cystic ripening of the follicle. The rest of the ovary was corrugated and atrophic. No corpus luteum was found. Shaw's idea is that the abnormal endometrium acts on the ovaries to inhibit complete follicle ripening and the formation of corpora lutea. The ovaries produce a toxic substance which in turn causes a disintegration of the pre-menstrual endometrium with resulting hemorrhage.

Shaw calls his second group the epimenorrhoeal. It constituted 36% of his cases and was made up of women anywhere between puberty and the menopause, but was most common between the ages of 40 and 50. It was the most numerous of his five groups. In these cases the normal menstrual cycle was suddenly changed to a cycle of two weeks with a greater and longer flow. The women were all parous. The uterus was somewhat symmetrically enlarged. The ovaries were negative on palpation. The endometrium was thicker in most instances but was occasionally reduced in amount. The ovaries were small, corrugated and

atrophic, but they contained hemorrhagic cystic follicles. This is very characteristic. Histologically the endometrium was not hyperplastic or necrotic, but the stroma was edematous and hyperemic. This latter probably explains the excessive bleeding. One or more corpora lutea may occur in the ovaries. Shaw believes this to be a manifestation of ovarian dysfunction in which ovulation occurs too frequently.

Shaw terms his third group the hypomenorrhoeal group and it composed about 8% of his cases. It was made up of women from 40 to 50 years of age. The duration of the menstrual cycle varied from 35 to 42 days, and there was an increase in the amount and length of the flow. The uterus was normal or slightly larger in size. The ovaries were very hyperemic and contained large follicular hematomata. The endometrium was grossly normal but histologically there was found hyperplasia of the glands with great edema and hyperemia. This latter condition accounts for the increased flow. Shaw explains the etiology of this group as ovarian disturbance with irregular ovulation.

Shaw terms his fourth group metrorrhagic. This group contained 5½% of his cases and occurred in women from 30 to 40 years of age. In these the periods were normal and the rhythm regular. But there occurred intermenstrual staining, accompanied at times by severe backache. The uterus was normal, but the ovaries were enlarged and hyperemic. There was ovarian hyperplasia and hypertrophy. This, in Shaw's opinion indicated hyper-activity. The endometrium was normal except for hyperemia.

Shaw's fifth group accounts for 6½% of his cases. These were cases of endometritis with the typical findings of chronic inflammation of the endometrium, the chief of these being the presence of many plasma cells throughout the stroma. These cases had a history of preceeding typhoid, pneumonia, puerperal sepsis, gonorrhea, infected polyps, etc.

These groups do not appear to account for pubertal bleeding, as indicated by Shaw's age of incidence. However, it may account for a large number of the truly fundamental hemorrhages occurring in young

girls, and the other cases of excessive bleeding at this time may be due to other causes such as purpura, chlorosis, and dyscrasias of other types.

Although Shaw's work represents so far as I know the only effort to classify functional uterine hemorrhage on the basis of ovarian histopathology, the work of a great many men tend to substantiate more or less his findings. At this time in the Tumor clinic of the Massachusetts General Hospital an effort is being made to classify their cases under Shaw's classification. This clinic has recently published a very interesting report of the work which strongly tends to substantiate the work of Shaw. Novak states that about one-half of the cases of functional bleeding occur in women over 40 and about one-half in those under 40, with 5% occurring near puberty. He states further that skipped periods occur in about one-sixth of the cases. Schroder believes that absence of corpus leuteum bodies in the ovaries is a characteristic finding in functional hemorrhage, but Novak has noted a few exceptions to this. Novak has suggested that this type of bleeding may be a reversion in the human to the follicular type of menstrual cycle which seems to occur in certain of the lower animals. Kelly still believes that the bleeding in many of these cases is due to changes in the uterine musculature with endometritis, and that the only clinical sign may be some enlargement of the uterus. On the other hand J. Halban ascribes the bleeding to repeated ovulation, but states that where organic uterine changes exist the bleeding may be very severe. He states further that continued impulses from the ovary causes the uterus to undergo hypertrophy, with hyperplasia of the myometrium, endometrium, and blood vessels, and this leads to continuous hemorrhage. Novak states that no conclusive evidence has been presented which would justify the ascribing of more than an occasional case of uterine bleeding to arteriosclerosis of the uterine vessels. It would appear from the work of several investigators that the term "Fibrosis Uteri" as used to indicate pathological replacement of uterine muscle by connective tissue is incorrect. With each succeeding pregnancy there is a physiologic increase in the amount of elastic

tissue laid down in the uterus. This is not a replacement, and it does not appear to interfere with the efficiency of the muscle.

We have very little space left in which to consider treatment. The first essential in treating uterine hemorrhage is to ascertain the cause and to remove it if possible. This applies particularly to bleeding from polypi, from diseased endometrium, to that resulting from tumors of the uterus, of the adnexa, etc. In all cases after the third decade malignancy should be ruled out. At this age cancer, fibroids, and polyps are the most frequent pathological causes of hemorrhage. In the cases of uterine hemorrhage associated with purpura, hemophilia, syphilis and the other dyscrasias local treatment is of no avail, for the underlying condition is the one demanding attention. There are certain physical measures that are applicable in all cases during that interval of observation and study essential to making a full diagnosis. Rest in bed lessens the tendency to bleed. Cold applications to the lower abdomen has a good effect dependent upon the contracting effect of cold on the uterine muscle. Long hot vaginal douches, when taken in the recumbent position, are especially valuable in metrorrhagia. Vaginal tampons are of temporary value in that they both exert pressure upon the cervix and stimulate uterine contractions.

The various drugs which are so valuable in hemorrhage associated with recent pregnancy have little effect on the bleeding under consideration. The intrauterine use of various drugs including zinc chloride, phenol, and formalin has been used and is recommended by some, but their effect is similar to but not as efficacious as curettement. The injection of human blood, blood serum, and horse serum and the various proprietary hemostatics are valuable particularly in the hemorrhage associated with the dyscrasias.

The pubertal hemorrhages have been treated in various ways. Stickel and Zondak advise pituitary and testicular extracts. Novak reports best results from the lipoid containin^g extract of corpus leuteum, given daily under the skin and beginning one week before the expected period. The Tumor Clinic of the Massachusetts General Hospital is using corpus leuteum in their cases of functional

hemorrhage with very good results. Calcium used intravenously is claimed to be very beneficial in many cases.

The most widely used treatment of hemorrhage associated with hyperplasia of the endometrium is curettement. Curettement usually relieves for four or five months, but it almost invariably has to be repeated from time to time, and it does not appear to be curative. However, an adjustment of the underlying cause frequently takes place during the time of treatment. Pituitary extract, frequently combined with thyroid may be used in conjunction with this and seems to be of decided value. In those near the menopause where there is no special indication for laparotomy the ideal treatment is radium. X-ray irradiation in some cases offers most satisfactory alternative form of treatment. Even in adolescent girls radium may be used with great caution and usually with marked benefit. In these girls X-ray is not as valuable as radium and is more dangerous because of the fact that its principal action is a destruction of the Graafin follicles. Although the action of radium is not thoroughly understood it appears to exert, when used in this way, its chief action on the uterus itself. Of course hysterectomy is always curative, but it is only applicable, except as a measure of last resort, to those approaching the climacteric.

In conclusion I wish to urge that cases coming to you with a history of menorrhagia be not dismissed with a prescription for a preparation of ergot or for one of the highly advertised organo-therapeutic preparations, but that each case be submitted to careful study and thoroughly examined in an effort to determine the underlying cause of the condition. It is not fair to this type of patient to allow them to continue bleeding until they are weakened by anemia and until their mental outlook becomes discouraged or even hopeless and until their means have been expended in a useless effort to get well.

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*THE DEVELOPMENT OF INTRA- VENOUS THERAPY

By O. B. Mayer, M. D., Columbia, S. C.

It is hoped in this paper to trace briefly the development of intravenous injections from the earliest recorded history to the early part of the twentieth century. It is needless to say that the data collected is from various articles at hand and not original. First, it might be well to visualize a few of the obstacles that confronted the earlier investigators and to recall certain dates in medical history. It was not until 1613 that Harvey demonstrated the circulation of blood and not until 1628 that he published an account of it. It required a quarter of a century more before the inquisitiveness of man led him to investigate and experiment upon the introduction of fluids into the circulating blood.

Therapeutics had been practiced since the earliest time and history records a multitude of agents and concoctions used in combating disease, but all had been administered by mouth. It may seem strange that intravenous medication was developed before the simpler

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hypodermic method and that the epidermatic practice, or applying drugs upon the skin, came first in the unfolding of hypodermatic methods; then endermic and finally hypodermic.

The story of hypodermic medication is fascinating but would take us afield. However, intravenous and hypodermic development overlap each other at a later date, and the latter will be briefly mentioned further in the paper.

With the development of any science there are unknown facts to be worked out and pitfalls that have to be found and avoided. Intravenous methods went through trying times. Antisepsis was unknown or rather unpracticed at this time. Lister's work was published in 1865 or 1867 or about two hundred years after intravenous injections were being given to man. Little was known about the action of drugs or the therapeutic dosage even when given by mouth. Drugs at that time were not as refined and the toxic elements not removed. Little was known about the solvents or about the fact that when given intravenously the drug was more potent and acted more promptly. Neither were there hypodermic syringes. These had to be developed and perfected years later. Probably if the use of antisepsis had been known or that fatal reactions may follow when drugs are given intravenously, even under the most advantageous circumstances the days of intravenous development may have been postponed later than 1656. It takes vision, imagination, courage, originality, and strong conviction to become a real discoverer. Discouragements from failure, bad reactions, fatal endings, and public opinion had to be swept aside, for progress is no respecter of feelings. Medical development which would furnish the means of saving human lives and controlling pain and which was destined to be successfully achieved by courageous and brilliant experiments was in the making.

Most medical historical writers have included blood transfusions as part of this subject. History records that blood transfusions were given by the ancients; the Egyptians in fact, practiced it from the earliest times, and record is cited of the recommendation that Pope Innocent VIII be

transfused in 1490. An account states that a Jewish physician, Abraham Meyre, who was said to have been a quack, advised the transfusion. The blood was to be taken from young donors. To obtain enough three youths age ten years old were bled and each received a ducat. However, all three died almost immediately, presumably because too much blood was taken. When the Pope heard of this, he was much angered and the Jewish doctor was forced to flee. Whether the transfusion was actually given is not clearly related by the historical account. The Pope is thought to have lived two years longer, dying in 1492 from Bright's disease.

According to Keith, (Mayo Paper 1929) Richard Lower in 1665 first successfully did a direct transfusion from one animal to another by the employment of long tubes; in 1667 Denis of Paris maneuvered to have sheep's blood run into the veins of man. But because of fatal reactions the French Civil authorities later barred further practice of the procedure.

The following information concerning the development of drugs given intravenously has been found in an article written in the American Medical Association Journal in 1916 by Macht and in an article "The beginning of Intravenous Medication" by Horace Brown in the Annals of Medical History, (1917-1918, Volume 1, Pages 177 to 197). Intravenous injections were first made in 1656 by Sir Christopher Wren, who was an English architect, astronomer, mathematician, and scientist, and not a medical man. This brilliant man when he was twenty-five years of age did his first experiments on dogs. He selected large, lean ones with accessible veins. A quill and bladder was the apparatus used to inject opium and crocus metallum. The opium caused stupefaction; the other drug, violent vomiting and death in one instance.

These experiments are said to have been repeated with similar results in 1658 by Carola Fracassato, at Pisa, and an account of them were published in 1665.

The first intravenous injections in humans were made by Wren in 1658 or two years after his original experiments. It appears that a certain foreign ambassador was visiting at the Court of St. James and became in-

terested in Wren's work. He offered a delinquent servant as a human subject. Unfortunately Wren chose *vinum emeticum* for the injection. The subject fell into a swoon and the experiment was discontinued. About 1662 another Englishman, Major, who was a practitioner and who had done much animal experimentation, successfully injected human beings intravenously. An interesting account by Brown is as follows:

"1. A large dog was infused with liquid extract of opium one ounce. After half an hour he became stupid and torpid, then he fell asleep and would permit needles to be thrushed through his tongue without resisting, hardly noticing them, and after having slept for two days and one night he recovered.

2. A dog was infused with (Croc metal-lorum) oxidized sulphuret of Antimony grains 16, in one ounce of water, not filtered. This brought on vomiting and the next day he died.

3. In another large dog (a mastiff) a very small quantity of the same medicine was infused. Nothing unfortunate happened, and afterwards the same medicine to the ordinary dose, namely, one ounce, was given; the dog, like the other, vomited violently.

4. Then with acids a large number of infusions were made, but it was observed that all these coagulated the blood and death quickly supervened; but a few grains of oil of tartar (*liquor potassii subcarbonatis*) produced only a bright and very red condition of the blood.

5. When a decoction of arsenic in common water was infused up to one ounce, into one dog, death was brought on.

6. In the same manner, when a solution of one-half drachm of corrosive sublimate desolved in water was injected into the crural vein of a strong dog, the dog after a short time passed away.

7. Another dog was injected in the crural vein with nitre (*potassium nitras*), and nothing happened.

Major made a note of the fact that if the dog were injected in the jugular vein he died, but that if a common vein were used for the infusion he usually survived. (Were these deaths by air embolism?)

Eschultz published in 1665 an account of

three cases he had treated. One, a soldier with an ulcer on the foot (probably luetic) received *aqua plantaginis* in the crural vein. The other two had an obscure condition and received *aqua cochlearia*. The following year, 1666, Fabricius reported three cases he had treated. One, a soldier with a luetic exostosis, received scammonium and two epileptic women received resin of jalap. The next year Schmidt reported five cases: two were syphilitics and received the favorite jalap.

In 1668 Stirius gave a summary of the work to date, including his own experiments. It seems that the most frequent reagents used were alcohol, spring water, opium, tartar emetics, jalap, etc.; namely, purgatives, emetics, and narcotics. He believed that infusions were best but should not be used in pregnant women. He also observed that "So much opium as is ordinarily given to a man will throw a cat into a fatal delirium, whereas, it will cause no harm to a dog." He permitted himself to be injected with *aqua cardui* on two different occasions without untoward reactions.

Of this earliest period three facts are stressed: First, the discovery of intravenous injections by Wren; second, opium, the most frequently used drug then, is probably still the most valuable drug today; third, that by 1666 syphilis was being treated by intravenous medication.

The second period of intravenous history is from the end of the eighteenth century to the middle of the nineteenth century and is characterized by more careful experimental work. Freind experimented with the injections of alkalies and acids, and in 1773 published his work on this subject and called attention to the danger of injecting too much air in the vein.

A little later workers found that oil injections were not practicable. In 1814 Baron Percy treated two series of tetanus cases by injecting opium and stramonium. Three out of five in the first series recovered, and in the second series five out of eight. Magendie in 1823 pointed out that a rabid animal required more opium than an ordinary animal to produce narcosis, and experimented on the treatment of cholera by injecting camphor in dilute alcohol. Danials in 1827 published an

article on the subject to date and mentioned that one-fourth of a grain of mercuric chloride would produce death in a middle sized dog. Doctor E. Hale of Boston, characterized as a bold experimenter of his time, injected himself with a half-ounce of castor oil and actually survived to write of his experiences. In 1869 Doctor G. B. Halford, an Australian, advocated the injection of ammonia for snake bite, but later workers threw the practice into discard. Ore in 1874 advocated the use of chloral instead of opium for tetanus and hydrophobia. The practice was later found dangerous and given up.

The third period is characterized by the development of bacteriology. Investigators then tried to build up the patient's resistance or to inject substances that would destroy infections. Lauderer in 1892 advocated the intravenous injections of balsam of Peru and later sodium cinnamate for tuberculosis. Sodium cacodylate was advised by Gantier in 1897 for pernicious anemia. Ma aria was treated by intravenous quinine in 1890 by Baccelli. Crede' in 1901 used all kinds of silver salts for all kinds of infections.

Shortly after this the established value of salvarsan and strophanthin came into being. Among the drugs that were injected from 1825 to 1904 are as follows according to a list by Eggleston:

International Clinics, Vol. 11, Twenty-Seventh Series, Pages 150-151.
From 1823 to 1904

Castor oil half an ounce
Strychnine
Morphine
Chloral
Cinnamic acid and sodium cinnamate
Arsenious acid
Sodium cacodylate
Quinine
Mercuric chloride
Mercuric cyanide and oxycyanide
Formaldehyde 1:500
Protargol
Silver citrate
Colloidal silver

From 1683 to 1832

Aqua cochleariae
Aqua plantagenis

Resin of scammony dissolved in essence of ovajac
Snail water
Spirit, salis ammoniaci
Spirit, salis essentificatus (with or without spirit, vini camphoratus)
Resin of jalap in spirit, lilium convallarium
Aqua croci Metallorum
Opium
Aqua chrysalea
Spiritus nitrosi vel Vitrioli
Oil of sulphur
Arsenic
Plantain water
Aqua cardui benedicti
Aqua marjoranae
Amber
Cinnamon
Confectio alkermet
Sal Volatile
Oleosum silvii
Sal volatile cornu cervi
Spirit, cinnamoni cum oleo succini
Balsam of mecha
Spiritus ligni

It might be permissible to briefly state the endermatic medication had its being about 1823. Epidermatic administration had preceded endermatic by some years and was used for ointments and lotions, while endermatic was used extensively for vaccination with cowpox virus.

Although there is some dispute about the matter injecting drugs under the skin was given credit to a Scotch physician, Alexander Wood, of Edinburgh about 1853 and an Irish surgeon, Rynd, is said to have practiced it in 1844. An article by Rynd in 1845 describes the injection of creosote along the course of the supra orbital, temporal, molar, and buccal nerves by punctures for neuralgia. He did not describe the instrument by which the injections were made until 1861. It apparently was a crude affair and fluid was allowed to flow by gravity through a hollow needle. However, Wood referring to it in 1853, wrote as follows: "Having occasion about the end of 1853, to endeavor to remove a nervus by injection with acid solution of iron, I procured one of the elegant little syringes constructed for the purpose by Mr. Ferguson of Giltspur Street, London. While

using this instrument for the nervus, it occurred to me that it might supply the means of bringing some narcotic to bear more directly than hitherto I had been able to accomplish on the affected nerve in neuralgia." However, the prototype of our modern hypodermic syringe was copied by manufacturers from the pattern which was devised by Charles Pravaz of Lyons, which became known as the "Pravaz Syringe," and which was in use in 1853.

It remained for Charles Hunter to point out in 1854, that it was unnecessary to inject opium at the site of the pain to get relief. Rupper of Boston, is credited with introducing the hypodermic method into the United States, only a few years before the Civil War.

It is gratifying in reviewing the subject that men of our mother tongue were the developers of intravenous and hypodermic medication and it is striking that it was first

introduced by a non-medical man at a time when asepsis was not practiced and hypodermic syringes were not in existence and that animal experimentation was done first, being followed by human experimentation, as is in vogue today.

Intravenous knowledge preceded hypodermic administration by almost two hundred years. It came into popularity just prior to the Civil War. The modern hypodermic syringe is of recent origin.

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*INTROSPECTION AS THE RESULT OF MEDICAL EXAMINATION

By C. F. Williams, M. D., Columbia, S. C.

It should be the earnest desire of every physician that all patients who enter his office for examination or advice should leave it with that degree of confidence which will relieve the strain of anxiety and satisfy his mind as to reasonable expectations, no matter what the findings may be.

This happy result is not always achieved, as many of us know from experience, but on the contrary actual damage is sometimes done. This prompts the writer to call your attention to some mental reactions of patients under medical examination leading to unhealthy introspection and often resulting in distress of body and mind. If some apparent criticism is indulged in let it be understood that no offense is meant, but only the friendliest suggestion is intended, for the writer feels that in the years of his general work he may have been more guilty of such errors than most of his hearers.

In medical circles it is frequently stated that more harm arises through negligence than through ignorance. There is certainly no excuse for the former and but little for the latter, yet, if one is to be rebuked for ignorance, the psychiatrist with all his peculiarities as seen by the general practitioner, would seem to be in the position of vantage, for, from his point of view, the lack of information on the part of the practitioner of general medicine as to psychiatric problems deserving attention would justify the belief that not infrequently patients are not only not benefitted, but are made worse by the examination and advice they receive from their physicians.

To those who understand the factors involved this is in no sense surprising. Not until comparatively recent years has the psychiatrist himself understood these problems and been able to assist the general practitioner in a better understanding of them.

The training of the physician of today is such that he feels he must arrive at a diagnosis by the process of elimination. To him the patient is in need of medical or surgical treatment—particularly is this true of the older members of the profession whose only knowledge of psychiatry has been gained by

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perhaps a few lectures in college and their experience with an occasional patient in practice.

With the psychiatric conception that the human being is a psycho-biological unit in which the psychic and the physical elements are inter-dependent, reacting one upon the other, with what we recognize as personality as the result, much light has been turned upon complaints which have not heretofore been understood.

Health implies harmonious adjustment, both physical and mental, and any examination that ignores the psycho-genic factors may fail to give the proper interpretation of the findings. Abundant proof of this is seen by the psychiatrist who is invariably called in sooner or later as consultant, or as attending physician in some institution where the patient has been committed, when there are no more organs to be removed, no more physicians to consult and when the entire profession has grown tired of the almost incessant and often pathetic appeals for relief. And relief from what? From mental disorders which have been altogether overlooked.

Cannon and his co-workers through their physiological researches a decade and a half ago threw considerable light upon body changes which take place in pain, hunger, fear and rage.

More recent clinical and laboratory studies call attention to the intimate relationship between the emotional states and the metabolic processes. It has been shown that in an acute psychotic disorder accompanied by intensely painful emotions there is a tendency toward hyperglycemia and a definite retardation of the gastro-intestinal motor functions. The calcium and phosphorus content of the blood is increased in the manic state, while there is a relative decrease of this substance in a tense, agitated, depressed state. Palor, flushing, dryness of the mouth, frequent micturition and changes in lacteal secretions associated with different emotional states is a matter of common knowledge.

The researches in physiology and psychopathology are contributing much to the understanding of cell and body functions as the results of emotional states.

When one considers that fear in some of its

wide and varied aspects is one of the factors almost constantly in the emotional field, and perhaps constitutes the most important factor in the production of certain stimulations, and at the same time through such stimulations is constantly influencing the body functions he can appreciate the importance of considering its causes and especially the possibility of its production as the result of medical examination and consultation, and the danger that may arise therefrom.

The following case reports may serve as illustrations:

CASE NO. 1

A robust young woman 19 years of age with a negative history as to physical and nervous disorders began suffering great pain at each menstrual period. After failure to get relief by the usual remedies prescribed for such conditions her mother took her to the family physician.

After the examination he called the mother aside into an adjoining room and told her he had found the uterus misplaced and thought an operation would be necessary for relief.

As the result of being excluded from the conference the girl quite naturally became seized with the fear that something dreadful had been found and when she was told by the physician that he wanted her to consult a surgeon she became so nervous and panicky she almost lost control of herself. From that moment she was an ill woman, having all sorts of vague pelvic discomforts, pains in her legs and back and soon there was experienced a constricted feeling about her head.

Each new sensation was interpreted as arising from the terrible condition that was found at the time of the examination and it was not long until the patient was a confirmed invalid, being confined to bed most of the time.

The fear of the advised consultation with the surgeon became increasingly distressing as the months passed by—it being felt that the surgeon would confirm the dreadful findings of the family physician.

This fear, combined with the added fear that most persons have of operations, had caused postponement of the surgical consultation for several months. During this time the patient had lost considerable in

weight, her appetite was poor, drugs were constantly taken for constipation, and for vague, indefinite but never-the-less disquieting pains throughout the body.

Finally with fear and trembling the surgeon was seen. His examination was merely one of routine, confining itself largely to the condition found by the referring physician. His findings were the same and he quite rightly advised an operation. The patient, as most patients with little or no anatomical knowledge, could not understand the degree of danger, and demurred. Whereupon the mother in an effort to get her daughter's consent for the operation inquired of the surgeon in her presence what results might come about if the operation were not performed.

His reply was most unfortunate for the patient and would hardly seem justifiable under any circumstances. It was this—"If she continues in her run down condition she may develop tuberculosis, or if she continues to worry she will lose her mind." His prediction was correct. The added worry caused by his statement was sufficient to break her down.

CASE NO. 2

A young man 21 years of age, a senior in one of the denominational colleges, developed a sore on his penis which was cured by dusting powder purchased from the local druggist.

His family history was negative. He was a man of excellent poise, of robust physical health, being one of the outstanding college athletes of his day.

About two months after the appearance of the initial lesion he began to suffer with rheumatic pains of a rather severe nature. He consulted the college surgeon who made him strip to the waist for the examination. After he had looked at the eruption and felt the cervical and epitroclear glands he turned away holding his hands up as though he felt there was danger to himself and that he must not touch anything until his hands had been washed and put through an antiseptic solution, which was immediately done in his presence.

In relating his story the patient said he must have shown in his expression the great

fear that had seized him for the physician on turning from the basin where he had been washing his hands and facing him immediately remarked—"I do not blame you for being worried for you have syphilis."

No resentment was felt toward the college physician for the diagnosis nor the manner in which he had been told of his trouble nor the attitude assumed during the examination. All of this was accepted as a matter of course.

Twelve years later an analysis of the incident reveals some interesting psychic phenomena. It was the attitude of the physician in holding up his hands that immediately recalled to the patient's mind the picture of a man back in his home town who was paralyzed, mentally deteriorated, had sores on his face and hands, and who he had been told by other boys of his acquaintance had syphilis. He was profoundly impressed by the plight of this man at the time he knew him. The loathsomeness of the condition as he recalled it sinking deeper in his mind than any aspect of the malady. He recalled that so disturbing was the sight and thought of this man that it sometimes interfered with sleep and created the feeling that he must avoid him.

This clearly explains the reaction that took place in the examiner's office six years later and constituted the basis for the psychic changes which have resulted in a psychoneurosis of the psychasthenic type with syphilophobia as the predominant disturbing element.

CASE NO. 3

A white woman 26 years of age, married and the mother of two children. At the birth of the second child she went into eclamptic seizures. The birth of the child was hastened by the use of instruments, but it was a normal and healthy child. For two days the mother was in a critical condition, but the reaction was favorable and the "lying-in" period presented no further unusual features. During this time, however, her physician told her she must not become pregnant again. If she did, she would probably have a recurrence of the trouble or worse—her mind might become affected as was the case with her friend, Mrs. A., who she knew had become psychotic during pregnancy.

This statement caused the patient considerable anxiety as she was more or less ignorant of the methods of contra-ception, and on one occasion after her menstrual flow had been re-established and was a few days late the anxiety deepened into a rather severe depression. It was during this time that I saw the patient and learned the history just related.

I am advised that some two years later the patient did become pregnant. There was a return of the depression and as the pregnancy advanced the patient became definitely psychotic, going into a catatonic state from which she has not recovered.

CASE. No 4

Another patient, a woman 42 years of age, thought her mind was becoming affected as the results of an internal goiter. Her doctor told her this was the trouble and he knew!

Case after case could be mentioned where introspection has been the result of either direct statements from the examining physician or the attitudes assumed by him which created doubt or anxiety. All of us are familiar with the anxiety that arises at the thought or suggestion of pellagra, hypertension, heart disease, cancer, endocrine discrasia, and sexual weakness or impotence; and this is but natural, for when one considers the driving forces in man—the obtaining of food, the avoidance of danger, and the reproduction of the species—and considers further the very intimate relationship that must necessarily exist between these forces he can then understand why so many patients exhibit fear on approaching the office of their physician, and why so many say—"Doctor, I would have been here long ago, but I was afraid to come." And why others ask—"If you find anything seriously wrong please do not tell me."

To prevent introspection as the result of such fear is to prevent many psychiatric disorders and problems.

To do this and to be able to recognize and interpret correctly the mental aspects of the case one must have at least that working knowledge of psychiatry which will give him the proper approach, for the manner in which the physician approaches the case often has

a great deal to do with the success which will result from his treatment of it.

To get the best results the physician must be a good diagnostician of human nature as well as of physical diseases. More often an error is committed in the former than in the latter. The great masters of men in all ages have been men who understood men. One cannot hold and control men without a deep insight into human nature. And the most successful physicians will be those who know how to comprehend their patients and to influence them.

The physician needs to know how to estimate quickly and accurately the personality of the patient who consults him. One patient will show a bold, courageous, aggressive nature and is accustomed to a rigid scheme of life. He could well stand being told the bare and even painful facts. He wishes to make a manful fight and needs to know what the fight is so that he may begin promptly and carry it to a successful conclusion.

Another will know that this is the right attitude to assume, but lacks the courage and patience needed to attain success.

Still another type of patient is encountered. A person with little nerve control, imagines that the physician's serious manner indicates something very dangerous and terrible, and quickly yields to discouragement and despair.

It is the duty of the physician to inspire a spirit of courage and patience.

If he allows the patient to be without courage and faith his work will be very difficult or even a failure.

Faith is often more than half the battle. It places the patient in the proper attitude and gives him the right poise which enables him to receive the full benefit of the treatment.

Happy is the physician who in the first interview can find the best avenue of approach to the special case in hand and proceed with the same intelligent skill in bringing a new patient into the right attitude toward his condition and toward the necessary treatment.

Personalities are as different as the leaves on the trees and the wise diagnostician of human nature has a keen perception of these variations.

To give the physician this understanding

there is need of better instruction in our medical schools, placing particular emphasis upon the group of psycho-neuroses and neuroses, as the various types comprised in this group constitute the most common type of personality difficulty with which the average physician has to deal; the establishment of psychopathic wards and clinics so that the students may have ample opportunities for study of the various types of psychoses. Such wards should be a part of all general hospitals. In addition to furnishing a place for the treatment of psychotic patients it would also

afford a common meeting ground and a point of contact for those engaged in the two fields of medicine. This would also furnish material for the instruction of staff officers, internes and student nurses.

Such a relationship would necessarily enlarge the usefulness of all concerned. Therefore, if the patient's interests are to be best served the laborers in the field of general medicine and mental medicine must be brought to the realization of the importance of this relationship and of co-operation to build up the proper scientific understanding.

TREATMENT OF CHOREA BY INDUCTION OF FEVER

LUCY PORTER SUTTON, New York (Journal A. M. A., Aug. 1, 1931), has treated twenty-four choreatic patients with intravenous injections of typhoid-paratyphoid vaccine as a means of producing fever. The results thus far have been good. There has been prompt cessation of the symptoms, and the course of the disease has seemed to be greatly shortened. In the cases reported the average duration after treatment was started was from eight to nine days. This treatment has been much more satisfactory than any other used at Bellevue Hospital on the Children's Medical Service. It appears to have definite advantages over phenyl-ethyl-hydantoin.

AVITAMINOSIS: III. SPECIFIC EFFECT OF VITAMIN B ON GROWTH AND LIPID METABOLISM: LIPEMIA AS SYMPTOM COMPLEX IN THIS AVITAMINOSIS

For the past four years BARNETT SURE and MARGARET ELIZABETH SMITH, Fayetteville, Ark., (Journal A. M. A., Aug. 1, 1931), have been searching for a symptom complex in vitamin B deficiency as may be evidenced by the blood chemistry picture. Their results, however, were, in the main, negative. They have considered of little clinical importance the anhydremia and the increase in the nonsugar reducing substances of the blood, which were frequently encountered. They feel, however, that their present observations may serve as an aid to the diagnostician, since they indicate the presence of a marked lipemia, i. e., a large increase in the concentration of lecithins, fatty acids, indicating unsaturation, in lactating mothers and nursing young and also in weaned animals, in this avitaminosis. Since there has been no definite yardstick by which to measure vitamin B deficiency from the standpoint of chemical analysis of the blood, as, for instance, the low phosphorus concentration in the case of rickets, it has been difficult to diagnose, positively, borderline cases of vitamin B deficiency as it exists in the United States; and it is hoped that a chemical study of the lipids of the blood will prove helpful to the clinician as a guide in vitamin B therapy, particularly in infant nutrition, in which anorexia is a common symptom complex.

CLINICAL STUDY OF ASCARIASIS

A. E. KELLER, HORTON CASPARIS and W. S. LEATHERS, Nashville, Tenn. (Journal A. M. A., Aug. 1, 1931) studied the clinical conditions found in 107 cases of ascariasis in white children and in 60 cases in Negro children, with 54 white controls and 69 Negro controls. A history of disturbed sleep was obtained in 60 per cent of the cases in white children and in only 15 per cent of the white controls, while in only 20 per cent of the Negro patients and 22 per cent of the Negro controls was this complaint present. Abdominal discomfort was present in 70 per cent of the white patients and in only 7.4 per cent of the white controls. It was present in 60 per cent of the Negro patients and 30 per cent of the Negro controls. The physical conditions were those which can be demonstrated in any average group of rural children. Protuberance of the abdomen was present in 60 per cent of the white patients and in 22.2 per cent of the white controls. It was present in 33.3 per cent of the Negro patients and in 23.3 per cent of the Negro controls. There were no significant changes in the total red blood cell counts, hemoglobin or total leukocyte counts in the cases and controls as groups. The differential leukocyte counts revealed an average eosinophilia of 8.9 per cent for the white patients and 5.3 per cent for the Negro patients. Both white and Negro controls had eosinophil counts which varied from zero to 10.5 per cent. The average eosinophil count, however, for both control groups was 2.9 per cent, which is considered normal. The eosinophilia does not appear constantly in cases of ascariasis, 16 per cent of the white patients and 31.6 per cent of the Negro patients showing an eosinophil count of 3 per cent or less. No definite correlation between eosinophilia and the intensity of infestation could be demonstrated. No correlation between the age of the patient and eosinophilia could be shown. This analysis presents few observations on which a clinical diagnosis of ascariasis may be based. The parasite causes abdominal discomfort and disturbed sleep. That the parasite causes some disturbance in the host is seen by the presence of eosinophilia. The negative clinical observations that are presented emphasize the importance of the routine examination of feces in a diagnosis of ascariasis.

SURGERY

Wm. H. Prioleau, M.D., Charleston, S. C.

SCALENIOTOMY IN THE TREATMENT OF PULMONARY TUBERCULOSIS

In recent years great advances have been made in the treatment of pulmonary tuberculosis. Most of these have been along surgical lines. They affect the mechanics of the chest in such a way as to lessen the activity of the diseased lung. As a rule they are applicable in cases of unilateral or predominantly unilateral involvement; thus practically always in early cases.

The procedures are of two main types; the radical, such as the extrapleural thoracoplasty, and the conservative. Among the latter are the pneumothorax which is very generally used, and the phrenic nerve exaeresis which was discussed in these columns a few months ago. A recent addition to the conservative group is the division of the scaleni muscles. Apparently priority for this procedure goes to Dr. J. W. Gale and Dr. W. S. Middleton of Madison, Wisconsin, though several investigators abroad are working along the same line. Their article is published in the Archives of Surgery, July, 1931.

Results far better than expected have been obtained by phrenic exaeresis. They are due to lessening the activity of the lung and decreasing the size of the hemithorax resulting from paralysis and elevation of the diaphragm. While the motion of the lower portion of the hemithorax is decreased, that of the upper is generally increased. No doubt this is com-

pensatory for the paralysis of the diaphragm—and also due to the lack of antagonistic action on the upper muscles. This elevation of the upper three ribs is produced for the most part by the Scaleni. It was therefore thought that division of the Scaleni would lessen the activity of the upper ribs and thus favor the healing of apical lesions by giving additional rest.

The scaleni muscles arise from the transverse processes of the third to seventh cervical vertebrae and are inserted into the first and second ribs. The operative approach is through a transverse incision above the clavicle, practically the same as for phrenic exaeresis. The authors recommend that the two procedures be carried out at the same time, if indicated. The operation is done under local anesthesia and is followed by practically no reaction.

The authors have carried out Scaleniotomy in seven cases. They are convinced that the procedure is sound from an anatomico-physiological standpoint. They note much less activity of the upper ribs than in cases having had only a phrenic nerve exaeresis. They give no case reports due to their observation not being over a sufficient time to warrant final conclusions.

Scaleniotomy is to be used in conjunction with other measures, especially phrenic nerve exaeresis. It gives promise of being of decided value in a large group of cases. Its field of application can be determined only by trial.

SOCIETY REPORTS

MINUTES OF THE MEETING OF THE SECOND DISTRICT MEDICAL SOCIETY, LEESVILLE, SOUTH CAROLINA, 21 JULY 1931

PLACE OF MEETING: City Hall.

PLACE OF SUPPER: Dr. Jas. Crosson's home.

The meeting was called to order by the President of the Society, Dr. T. A. Pitts, Columbia, S. C. Dr. Pitts regretted to have to announce that Dr. D. M. Crosson had notified him that he was unable to make the address of welcome due to illness.

Before the regular program was entered upon, Dr. Price Timmermann presented an unusual case to the society with a request for diagnosis and advice in regard to treatment. The patient was a child 13 years of age whom Dr. Timmermann had had under his care for the past several months. The onset of her trouble was an attack of malaria. She was given a course of quinine and arsenic. The malaria seemed to have been checked; but the child had become increasingly nervous since that time. She walks with an unsteady gait, has nervous jerkings, athetoid movements. There were irregular twitchings of the various muscles of the face and body. Speech is slightly impaired. Every few days there is a slight rise of the temperature. Tonsils have been removed.

The patient was examined by Drs. Dotterer and Cannon who reported chorea as a working diagnosis. Dr. Cannon suggested encephalitis. Hospitalization for complete study was recommended.

Dr. F. M. Durham reported a case of a patient on whom he was called to make an examination for cancer of the rectum. The rectum was found to be filled with small fecal masses to all appearances similar to marbles. The case was one of fecal impaction.

The first speaker on the program was Dr. J. R. Young, Anderson, S. C., President-elect of the State Medical Society. Dr. Young gave an extemporaneous talk on the subject, "The Value of Medical Societies to Medical Men," which was very instructive. He showed how men of all ages are benefitted by attending society meetings. Young men are helped by the contact established and the older men are kept from becoming stagnant. The acquisition of knowledge is the main object and service to ones patients is improved by comparing ones work with that of others. Dr. Young concluded his address by requesting that an experience meeting be held so that the older men might give their experience and their views on the question of Medical Society Meetings.

Dr. W. R. Barron was the first to respond and pointed out that the older men are always anxious and willing to help a young man who shows that he is sincere in his search for knowledge.

Dr. S. E. Harmon agreed with Dr. Young but emphasized the fact that the men who needed to be instructed most are the ones who do not attend medical society meetings. He would like to know how men of this type can be reached.

Dr. William Weston, Columbia, S. C. was to have read a paper, "Deficiency Diets in the United States," but due to being called out of the state, Dr. Weston was unable to attend the meeting.

Dr. Bruce Mayne, Malaria Research Officer of the United States Public Health Service, Columbia, S. C. read the next paper, "Malaria Therapy in the Treatment of G.P.I. Cases." Dr. Mayne explained that this method is very severe on the patients but is better than any other, including diathermy. The malaria organism kills the spirochete by increasing phagocytes and raising the temperature. Blood may be injected from one G.P.I. case to another but this is dangerous. The direct mosquito bite is best. This induced malaria is much easier cured than the acquired type. There is a question as to whether quinine idiosyncracies is physiological or psychic.

The use of plasmochin must be limited to the estivoautumnal type only. When other types of malaria are benefitted it is due to the quinine content of the plasmochin. In India, there are 20,000,000 yearly sufferers from malaria. An alkaline treatment is given. Two solutions are used, one for the quinine and one, an alkaline solution.

The time of treatment is reduced from 12 to 3 weeks. Dr. Mayne remarked on the fact that he had not seen a single case of G. P. I. while in India and attributed this to the probable fact that malaria is so prevalent. Dr. Mayne's paper was well received and generously discussed by Drs. Timmermann, Allison, Timons and Cannon.

The third speaker of the evening was Dr. J. H. Cannon, Charleston, S. C. Dr. Cannon reported two cases of acute yellow atrophy of the liver and presented the pathological specimens.

The first case was a young woman who was admitted to the hospital, complaining of pain in the stomach, abdominal swelling and jaundice. The veins of the abdomen were noticeably distended. On admission, the girl did not seem to be very sick. She was in the hospital 13 days;

during which time she rapidly became worse. The abdomen became greatly swollen and painful; and ascitic fluid had to be tapped. Jaundice became worse. Nausea, deranged mentality, high fever and lethargy ensued. The patient died in a coma on the thirteenth day. The pathological specimens were shown but no history could be obtained which revealed the cause of the condition. A possible light was made on the etiology when one of the orderlies connected with Roper Hospital told that he had seen this girl on several occasions attending negro religious meetings; and that on these meetings, it was revealed, that the enthusiasm of the congregation was heightened by drinks of coco-cola and sterno.

Dr. Cannon's second case was that of a woman 61 years of age who gave a history beginning with an attack of arthritis and neuritis six or eight months previous. Her physician had prescribed some tablets which afforded relief. Without advice of her physician, she had continued the use of these tablets. When seen by Dr. Cannon jaundice was developing. She was first seen in the hospital and very carefully studied. All laboratory tests were made. The liver on the first examination was normal in size but rapidly shrunk until it was but about one-third its normal proportions. The patient rapidly became more jaundiced and extreme nausea and vomiting ensued. The temperature continued to rise and she died on the fifth day. The pathological specimens of this case were also shown. The tablets this patient had been taking were cinchophen. Dr. Cannon urgently requested that one be careful in the use of this drug.

Dr. Henry Plowden made an interesting discussion of the pathological appearance and the microscopical sections of the specimens of these two cases.

Dr. O. B. Mayer called attention to the low blood sugar in these cases and stated that hypoglycemia is more or less characteristic of these cases and that nausea may be relieved by glucose. He stated that cinchophen has become a very valuable drug in his work but insists that the patient be instructed in its use.

At this point of the program, notice was given that the dinner was ready and the society adjourned to the home of Dr. Jas. Crosson where a delightful and bountiful meal was thoroughly enjoyed by all. Due to rain, the remainder of the program was completed at Dr. Crosson's home.

Dr. F. M. Durham had a delightfully witty paper, "Why Proctology is a Specialty." He recited the history of proctology. He explained the anatomy and physiology of the rectum. He gave the reasons for pain in ano-rectal surgery. The reason for failure of the general surgeon in the treatment of fistula cases is mainly due to the post-operative care. He stated that the general

surgeon does not make a careful preliminary study of hemorrhoid cases, consequently many cancers are overlooked. Dr. Durham says, "The general surgeon is no longer the bass singer in rectal surgery. He has slept on his rights while the proctologist has become a squatter in the rectum and now has the rectum by right of possession. The general surgeon should move out and allow the proctologist move in, thereby, 'rendering unto Caesar the things that are Caesar's.'" The injection treatment is a method developed by the proctologist. The average general surgeon operates as did his grandfather and has done nothing constructive in the way of rectal surgery since his grandfather's time. The general surgeon has unwittingly specialized in abdominal, breast and neck surgery. In these regions, he reigns as supremely as ever did a Caesar on his throne. Dr. Durham concluded his paper with this benediction: "May God bless and cherish the general surgeon and give him plenty of work and nurse him in the hollow of His hand but for the patient's sake to keep him out of the rectum."

The next speaker of the meeting was Dr. C. V. Akin, Pellagra Research Officer of the United States Public Health Service, Columbia, S. C. Dr. Akin gave a very interesting talk on pellagra and explained his work in South Carolina. He holds the view that diet is responsible and is working out Goldberg's theory as to the cause and cure. There is a direct relationship between financial depression and pellagra. He revealed the fact that observation on pellagra began with Dr. Babcock in 1907. The death rate in 1929 was higher than in any year. The cases seen now are not so severe as the early cases of 1910 and 1912, due to information which has disseminated. The recorded history of pellagra is not over 200 years ago. The first cause was thought to be due to bad air. Hundreds of theories as to etiology that have been advanced are ridiculous and laughable. Most of the so-called cures incorporate a good balanced diet. Some points observed by Dr. Akin are that patients have been observed from one and one-half to 80 years of age. Isolated cases are most frequently in women. "Once pellagra always pellagra" is true because it requires more and more pellagra preventatives and vitamins each successive year. There are still 40,000 cases of pellagra in South Carolina. Five hundred to 600 patients still die yearly from pellagra. Dr. Akin concluded his paper by earnestly and urgently asking the cooperation of all medical men in combatting this very serious economic problem.

Dr. Allison was interested in pellagra from a dermatological view. He has noticed that sunshine brings out the typical pellagra rash and suggests that short exposures of doubtful cases to make a diagnosis.

Dr. Akin's paper called for considerable further discussion. Drs. F. M. Durham, Cannon, Hayne, Black and Burnside gave some very interesting views on the subject.

The last speaker on the program was Dr. O. B. Mayer, Columbia, S. C., who had a very interesting paper on "Clinical Aspects of Gastric Ptosis." In the etiology of this condition, Dr. Mayer stated that introspection and the congenital make-up is very important. The thin tall nervous neurotic hypochondriac type of patient is predisposed. Worry, lack of exercise, repeated pregnancies, poor diet, etc., are other causes and incidents of this condition is probably higher than one would think. X-Rays are frequently misleading. The symptoms complained of are usually indigestion, gas on the stomach and nervousness. Pressure on the heart leads to a complaint of heart disease. Cramp-like pains are caused by pyloric spasms. Constipation follows rather than causes ptosis. There is nausea and a sensation of choking but vomiting is infrequent, except from secondary causes, such as cancer, new growth or adhesions about the pylorus. A correct diagnosis is difficult and many are operated on for other conditions. Treatment must be careful and thorough. Probably 80% will improve. Small meals should be given at frequent intervals. Patients habits should be regulated. He should lie down after meals. Bed treatment for four to six weeks may be necessary. Constipation may be combatted with mineral oil. Very little medicine is necessary. Dr. Mayer does not believe that elevation of the foot of the patient's bed is helpful. Surgery is not very successful. No form of treatment will correct all cases. Dr. Mayer's paper was thoroughly enjoyed and appreciated, but due to the lateness of the hour a discussion was not allowed.

Under the head of unofficial business, Dr. Price Timmermann moved that the regards and best wishes of the society be extended Dr. D. M. Crosson for his speedy recovery, and also moved that thanks be extended to Dr. Jas. Crosson and his household for the delightful meal. Dr. Gibson seconded this motion and it was unanimously carried.

The election of officers was next in order. Dr. Bunch nominated Dr. Brunson for president. The nomination was closed and Dr. Brunson was unanimously elected. Dr. Timmermann nominated Dr. Jas. Crosson for vice-president. He was unanimously elected. Dr. A. T. Moore, Columbia, S. C., was re-elected secretary and treasurer. The place of meeting was left for the president and secretary to decide.

Respectfully submitted,

AUSTIN T. MOORE, M. D.

SOCIETY REPORT

Second regular meeting of the month called to order by the President, Dr. James S. Fouche at 8:40 p. m. August 24, 1931.

Minutes of last regular meeting read and adopted.

No committee reports or unfinished business.

Dr. Julius H. Taylor moved that a committee be appointed to investigate the probable cost of employing a professional stenographer to take in detail the papers and discussions at our meetings. Amended by Dr. Harmon that the president and secretary be on the committee. Amendment accepted—seconded, discussed and passed. Committee consists of Dr. Fouche, Dr. William Weston, Jr. and Dr. Hugh Wyman.

Dr. Hugh Wyman moved that a minute book be kept with the names of the members of the Columbia Medical Society and their date of entrance into the society. Motion, seconded and passed. Dr. Hugh Wyman to be in charge of said book.

Dr. W. R. Barron read an interesting editorial from Holland's Magazine regarding the disagreement in diagnoses from the laity standpoint, which more or less discredited the medical profession.

Dr. G. R. Westrope presented the C. P. C. case in a most able fashion. Dr. Routh suggest the possibility of a tumor of the pineal gland. Dr. Madden stated the possibility of an ovarian cyst twisted on its pedicle. Further discussed by Drs. Harmon and W. R. Barron. Case of a six-year-old child with a tumor of the ovary which was a very malignant carcinoma. Closed by Dr. Bullock.

Twenty-eight members present.

Society adjourned at 9:30 p. m.

Respectfully submitted,

WILLIAM WESTON, JR.,

Secretary.

RIDGE MEDICAL SOCIETY MEETING

The Ridge Medical Society met at eight o'clock, Monday night, August 17, 1931.

The visitors were Drs. F. M. Durham and A. T. Moore of Columbia, and Dr. E. P. Taylor, Jr., a dentist of Batesburg.

The treatment of soft chancres was the chief subject of discussion. Various ones expressed their methods of treatment and they were varied but some stressed the possibility of the anus in females becoming infected. One point upon which all seemed to agree was the necessity of cleanliness of all parts adjoining the chancre.

Drs. Gibson, Frontis, Woodward and Timmerman talked of their attendance of the tubercular clinics at the State Park Sanatorium in July and of the benefits to be derived from such and ad-

vised more of the doctors to attend the clinics thereafter. Dr. F. G. Asbill called attention to the contagiousness of tuberculosis among the young nurses and physicians. Dr. Timmerman discussed the possibility of washerwomen contracting tuberculosis from washing and handling the clothes of tubercular people.

Dr. R. G. Asbill reported a case of unusual enlargement of the eyes and blindness in a small boy.

Dr. W. P. Timmerman gave a resume of the condition and treatment and progress of a case of chorea or encephalitis which was exhibited at the meeting of the Second District Medical Society meeting in July.

Dr. E. P. Taylor reported a case of rheumatism which was relieved entirely after all of the patient's teeth had been removed. He also discussed pyorrhoëa. Dr. Asbill in discussing pyorrhoëa said that faulty diet was a cause of it.

Dr. A. T. Moore read an interesting and instructive address on fractures and how to treat them.

Supper was served in the Commercial Hotel where short after dinner talks were made by Drs. Wise, Crosson, Durham and Moore and Dr. P. A. Brunson, President of our District Society.

Dr. W. P. Timmerman announced that the Ladies Auxiliary had decided to entertain the Medical Society at its next meeting at his home. The Society voiced its approval of the same.

The President appointed Dr. J. H. Mathias of Lexington County, Dr. P. A. Brunson of Saluda County and Dr. C. Beeler of Edgefield County members of a committee on securing new members.

The members of other committees were re-appointed.

Our attendance was larger than usual and much interest manifested.

Since our meeting Dr. J. W. Geiger of Lexington County, our honorary member and one of our past Presidents, has died. He was more than ninety-nine years old and probably the oldest physician in our State. I have been told that he lived all of his life in the section where he died.

SPARTANBURG COUNTY MEDICAL SOCIETY

The meeting was called to order by the Vice-Pres., Dr. J. T. Carter, July 27, 1931, and the minutes of the previous meeting were read and approved.

A symposium on "Visceroptosis" was presented by Dr. Henry Plowden, Dr. Floyd Rodgers and Dr. O. B. Mayer of Columbia, S. C.

Dr. Henry Plowden discussed the pathology of gastroptosis. Dr. Plowden stated that since the pylorus was fixed that prolapse of the stomach produced an increase in the acuteness of the angle between the stomach and duodenum. This increases the difficulty

of emptying the stomach and finally causes retention of food for 6 to 8 hours, distension and catarrh. The acid secretion of the stomach becomes impaired and the stomach becomes infected with the yeast, moulds and bacteria. Erosions, ulcers and secondary anemia also some times develop in severe cases.

Dr. Floyd Rodgers stated that the drop stomach was usually atonic, that is, the muscular wall is very flabby. The heart is also long and narrow and often times the heart muscle is weak. Cardiospasm and pylorospasm are also associated with gastroptosis. A majority of these patients also have spastic contractions of the colon and constipation.

Dr. O. B. Mayer stated that the ptosed stomach was usually dilated and atonic, or both. It is usually found in slender women and is present at birth or there is a constitutional predisposition to its development. A slight amount of ptosis produces no symptoms. It is usually necessary for the lesser curvature to be below the interiliac line before symptoms are produced. Many of these patients have symptoms of ulcer.

The treatment of gastroptosis consists in giving the patient four or six small, easily digested meals a day, consisting of cream, milk, butter, eggs and cereals. A small amount of meat, poultry or fish is allowed. The patient is also given bread, but not biscuits. Desserts, such as, gelatine, custard and ice cream are also an essential part of the diet. In severe cases it is necessary that the patient rest in bed 24 hours per day. Ordinarily, however, it is only necessary for the patient to rest in bed 30 to 60 minutes after each meal. It is not necessary to elevate the foot of the bed. The patient should be given large quantities of fluid. Abdominal supports some times help. They should be put on before the patient gets out of bed and it is necessary to examine the patient with the X-ray to make sure that the belt or corset is actually helping to hold the stomach high in the abdomen. Gastroptosis has increased considerably in the last few years due to the fact that a large number of women have gone on diets and lost considerable weight. Many women, who formerly wore corsets, no longer wear them and the abdominal walls are weak and the stomach drops.

These papers were discussed by W. W. Boyd, J. C. Josey and W. M. Sheridan.

The Secretary announced that there would be a course in the diagnosis of Diseases of the Chest on July 29th and 30th at the State Sanatorium, Columbia, S. C.

There being no further business the meeting adjourned.

Dr. J. T. Carter, Vice-Pres.

Dr. W. M. Sheridan, Sec.-Treas.

SPARTANBURG COUNTY MEDICAL SOCIETY

The meeting was called to order by the President, Dr. H. E. Heinish, Jr., June 29th, 1931, and the minutes of the last meeting were read and approved.

Some very interesting case reports and patients were shown by Dr. F. H. Sanders and the Resident Staff. A case of Landry's disease and also a patient with complete loss of hair on the body were shown to the

Medical Society and two cases of aneurysms were reported.

There being no further business the meeting adjourned.

H. E. Heinitsh, Jr., Pres.

W. M. Sheridan, Sec.-Treas.

COLUMBIA MEDICAL SOCIETY

First regular meeting of the month called to order at 8:40 P. M. by the President, Dr. James S. Fouche, August 10, 1931.

Minutes of last regular scientific meeting read and adopted.

No clinical cases reported.

Dr. Leonadas Carey Davis elected a member of the Columbia Medical Society.

Dr. Eugene Payne elected a member of the Columbia Medical Society.

Dr. M. M. Rice's application for membership received.

The first paper of the evening was Urinary Obstruction by Drs. Marion H. Wyman and Hugh Wyman. Three very interesting cases were cited and illustrated with X-ray pictures. One pathological specimen of growth in ureter was shown.

The second paper by Dr. J. E. Boone on Importance of Urological Investigation was well presented, bringing out some good points especially the importance of ureteral strictures.

The discussions of both papers was ably opened by Dr. W. R. Barron. Discussed by Dr. Davis, Dr. Zemp and Dr. Haromn. Closed by the authors.

Twenty-six members present and one visitor.

Society adjourned at 10:10 P. M.

Respectfully submitted,

William Weston, Jr.,

Secretary

COLUMBIA MEDICAL SOCIETY

Medical Society Hall, July 27, 1931.

Second regular meeting of the month called to order by Dr. S. E. Harmon at 8:30 P. M., in the absence of Dr. Fouche.

Minutes of last regular meeting read and adopted.

No committee reports.

Dr. I'on L. Weston elected a member of the Columbia Medical Society.

Dr. L. H. Jennings was elected a member of the Columbia Medical Society as transfer from Oconee County.

Dr. G. R. Westrope was elected a member of the Columbia Medical Society as a transfer from the Ridge Medical Society.

The State Tuberculosis Association is holding a meeting at the State Park Sanatorium on July 29th and 30th at which meetings Dr. Paul Ringer of Asheville will conduct a clinic on Wednesday and Dr. Sidbury from Wilmington on Thursday.

Clinical pathological conference case was presented by Dr. Emmett Madden. It proved a most interesting case being discussed by several members of the society, especially Drs. Harmon, Bullock and W. R. Barron. Closed by Dr. Madden and Dr. Pitts as carcinoma of mediastinal invading the pericardium.

18 members of the society present.

Society adjourned at 9:30 P. M.

Respectfully submitted,

William Weston, Jr.

Secretary

COLUMBIA MEDICAL SOCIETY

Regular scientific meeting July 14, 1931.

Meeting called to order at 8:35 P. M. by Dr. Theo DuBose, Jr., acting president.

We had the pleasure of having with us our secretary Dr. E. A. Hines who gave us some excellent suggestions in regard to our state meeting here next year. He rugged more clinics and criticized the exhibits at previous meetings. Referred to the wonderful exhibits both scientific and commercial at the A. M. A. meeting in Philadelphia. Also spoke of the recent interest in public health work and White House Conference on Child Welfare.

Under clinical cases Dr. Boone spoke of 3 cases which he had performed the Punch operation on the prostate with a resectoscope. Dr. W. R. Barron discussed it and demonstrated this new instrument.

First speaker was Dr. F. Durham who read a delightful and very entertaining paper on "Why Proctology is a Specialty." He emphasized post-operative case and the injection method for hemorrhoids. Also criticized the surgeon for tramping on the proctologist field.

Discussion opened by Dr. H. Griffin who emphasized the cause of hemorrhoids also discussed by Dr. Julius Taylor and closed by Dr. F. Durham.

The second paper on "Tic of the Diaphragm" was given by Dr. Hugh Smith which reflected a great deal of credit upon himself for his progressive medicine. He cited two cases: the first one developed tic after operation for intestinal obstruction.

Freezing the phrenic nerve gave temporary relief but resection of both nerves were finally necessary for relief. Another operation required to remove regenerated phrenic nerve before final cure was obtained. The second case followed encephalitis and same procedure was necessary.

Discussion opened by Dr. J. Heyward Gibbes also discussed by Dr. O. B. Mayer, Dr. Beecham and Dr. Horger. Closed by Dr. Hugh Smith.

There were 37 members present. Meeting adjourned at 10:20 P. M.

Respectfully submitted,

F. Eugene Zemp, M. D.,

Acting Secty.

BOOK REVIEWS

THE YOUNG DOCTOR THINKS OUT LOUD.

By Julian P. Price, M.D. D. Appleton and Company, 1931. Price \$1.50.

Dr. Price, with becoming modesty, has written a book which covers a period of Medical Practice often trying and too often tragic. That the Young Doctor is thinking is well known to those older men in the Profession who have kept up with their problems. That he is thinking out loud, certainly to one another, is splendidly brought out in this book. It is a subject that strangely has never before been covered in book form. The Doctor has been through the early years, and while he admits that he has been most fortunate in his personal solution of this period of life, he has given his subject a great deal of thought and writes convincingly of not only his personal experiences but also of his personal observations.

In the several chapters he has discussed those subjects which are of interest to all young men who are contemplating the study of medicine. Chapters on premedical and on medical education itself are well done. He has some timely and wholesome criticism of the present methods of teaching and I heartily agree with the Author that there is room for improvement. All physicians will recall their difficulties in the early years with the simple problems of bronchitis, gastro-enteritis and otitis while waiting for those more interesting cases of von Recklinghausen's disease which had been so beautifully covered by several teachers delighted with such an opportunity. That the average young medical graduate is poorly prepared to properly care for infants and young children is too well known and deserves criticism for the fact. The Medical Teacher and the Medical Student will both find many stimulating thoughts in this book.

The problems of the Young Doctor who specializes and of the Young Doctor in General Practice are discussed. He is a little impatient with the average established General Practitioner, but his impatience offers constructive criticism which would prove provoking to this group of Doctors, who are certainly the most important and powerful men in medicine. The necessity for continued study and attendance on meetings and the reading and discussing of papers is stressed. The tendency of the laymen to go direct to Specialists is due to modern developments, such as good roads, fast transportation and the ever increasing knowledge

of the laymen in affairs medical. The Medical man who fails to keep abreast of the times is certainly and steadily being forced into the back ground.

There are several thoughts in this book with which I do not agree. The Author apparently thinks that Internes should be paid for their service. I fully agree that they are given many unpleasant duties which are petty routine and mighty tiring, but in return they receive training in properly conducted hospitals which is invaluable.

There is an interesting chapter on the Young Doctor and charitable work. It is difficult for the Young Doctor to give so much of his time without a certain resentment during the first year or two when he is worrying over the office rent, and the payment on his auto. The age old custom of including the Preacher in his list of free patients is mentioned, with, I am afraid, a little too harsh condemnation of this custom, because of the exceptional Preacher who is exacting and demanding during the illness and then unfortunately fails to acknowledge his appreciation when well. In the not very far past, Preachers were less well paid than now and it may become necessary to adjust this old custom with the newer order, when it is now probable that their average income equals or exceeds that of the physician who gives them his services. It is my experience with these men that the great majority prefer to pay their physicians and that they are certainly as grateful for our efforts as any other group of patients we see.

To have written such a book without a precedent and to do it so well deserves praise. I have enjoyed it and feel that all Doctors would find it valuable, and to the young man contemplating medicine and to the medical student and interne, I recommend it as the one book with which I am familiar discussing such important questions. Hugh Smith, M. D., Greenville, S. C.

THE YOUNG DOCTOR THINKS OUT LOUD.

By Julian P. Price, M.D. Price \$1.50. Pp. 187, and a foreword by W. C. Davison, M.D. Dean. D. Appleton and Co. New York & London, 1931.

Books by doctors are not rare, and many of them have enriched the world's literature. To cite three who appeal to widely divergent tastes, one might name, Weir Mitchell, Con. n

Doyle and Somerset Maugham.

Books about doctors have also been written. In some he is merely one of many characters, in others he is the hero, and in yet others the work is biographical. One of the finest of these is of course Harvey Cushings, Osler. More recently, Eckstein has produced a very thorough and most interesting life of Noguchi.

But a book by a doctor about the doctor, and particularly about the young doctor is something of a novelty. Dr. Price has given us proof that the medical student, the interne and the doctor who has just been turned loose on the public, does some thinking, and much of what he says is worth pondering on.

His chapters on premedical and medical school education, should prove of great value to the young man who is at the threshold of medicine as a career, while the sections devoted to the interne might be read with profit not only by the interne, but all hospital attendings and the hospital superintendent.

The author has not only done some thinking along the lines of medicine and the medical man's problems, but has done quite a bit of reading, not only in medicine but in the humanities. He seems to have a high regard for literature, art and music and all those things that make life worthwhile.

In short the little volume is frank, to the point and very interesting. It is illustrated, so to speak, with personal anecdotes and bits of conversation gleaned in the clinic, office and home. All those interested in medical education for themselves or others can profit by its perusal.
—R. M. Pollitzer, M.D., Greenville, S. C.

DEFICIENCY IN PRESENT-DAY EDUCATION

A. C. Ivy, Chicago (Journal A.M.A., Aug. 29, 1931), states that it is being recognized more and more that education by dictation is not a success. Educators are beginning to recognize that one learns effectively only by doing. The scientific method of doing, of learning by experimentation, the method by which science grows, is being introduced into secondary and primary education in the best school systems, and the courses in the curriculum that can be taught only by dictation are losing their former hold on the educational process. This movement should be encouraged. The child and the youth should be encouraged, in spite of the additional labor on the part of the teacher and the additional expense involved, to answer questions by searching for them by experiments, so that the scientific method may become more of an automatic cerebral process. However, the introduction of the scientific method into the educational

system per se will not develop a true regard for the human body, the most wonderful creation, or a true regard for the facts of medical science, and will not meet what appears to be an outstanding deficiency in present-day formal education. The only method for accomplishing this aim is to introduce the study of biology and human anatomy and physiology into the curriculum of primary and secondary schools on a par with the "three R's." It is true that a little nature study has been introduced into the grammar grades of some of the best public schools and that a fair course in botany, zoology, physics and chemistry is offered in numerous high schools; but it is exceedingly rare to find a high school in which a good course in anatomy and physiology by a trained teacher is offered. In all high schools there are teachers with special training in Latin, English, history and modern languages but not in human anatomy and physiology. The present attempt at health education in the public schools is a highly laudable enterprise, to be encouraged, but as a rule is a feeble effort made by teachers who know very little anatomy and physiology, as a result of their own deficient education. Even colleges and universities turn out graduates who for the most part know relatively nothing about the human body. If health is one's greatest wealth and asset, if the human body and mind are the most wonderful creations, certainly an educated person should possess a working knowledge of human anatomy and physiology, and training in the knowledge of the human body should be equal to that received in English, history and arithmetic, or it should at least be given a significant and effective place in the curriculum and taught by teachers who have had some special training in the subject. Such a program would engender a wholesome respect and regard for the human body and its processes. Lessons in hygiene would be based on a background of facts and would be more keenly appreciated. People with the proper knowledge of the human body would not patronize cults and would realize that an expert knowledge of the body in health and disease cannot be acquired in a few weeks or months but only by years of specialized training. Much of the information now given to the public in regard to the advances in biology and medical science, in regard to health, quacks and nostrums, would fall on more fertile soil. The importance of periodic health examinations would be obvious. A population with a knowledge of the nature and control of the processes of the human body would stand with open arms to receive the advances made relative to the cause, control and cure of disease and would lend a more sympathetic and understanding ear to the advice and problems of medical science. The members of the medical profession should bring their influence to bear on the school boards and on the educators in their

communities to the end that an adequate and properly taught course in anatomy and physiology be introduced into the public school curriculum, so that people may have the opportunity and be stimulated to acquire a wholesome respect and regard for the human body and its processes. The author realizes fully the objections and difficulties that confront the adoption and inauguration of the foregoing suggestion. The chief obstacle is that there is a small minority that religiously fights and fears the truth. But in view of the progress of the past century, he is hopeful and dauntlessly optimistic that the present-day unrest in education is a good omen and that truth will prevail.

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The Journal

of the

South Carolina Medical Association

VOL. XXVII.

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The Journal

OF THE

South Carolina Medical Association

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EDITORIAL

EDITORIAL NOTES

The Editor spent a day recently in one of the pellagra clinics conducted by Dr. James A. Hayne, State Health Officer, and Dr. C. V. Akin of the United States Public Health Service in conjunction with the Oconee County Health Department. We requested the Director of the Health Department to give a brief description of the activities after the day was over. We publish these observations elsewhere in this issue of the Journal. We were greatly edified by the day spent with Drs. Hayne and Akin. Both have studied pellagra in a masterly way and they know how to teach what is known about this protean disease to the visiting physicians. One is taken on a little journey through the domain of modern dietetics, neurology, dermatology, stomatology, clinical physiology, much of physiologic chemistry, nutritional diseases in general, mental pathology and statistical slants from every corner of the earth. We would urge the medical profession of South Carolina to concentrate its

energies anew on the great problem of pellagra. The State Board of Health and the United States Public Health Service have entered upon an extensive campaign for the study of pellagra and it is highly desired that every doctor in the State lend his cooperation. The latest development is the selection of Newberry County as one of the counties in which exhaustive studies will be carried on over a long period of time.

South Carolina is most fortunate in having secured Dr. Akin for this service.

A meeting of the Third District Medical Society at Newberry was most interesting from several standpoints. Two of the important papers centered around anesthesia. The discussion was indeed illuminating and showed that South Carolina surgeons are trying out all of the newer methods of anesthesia as they are discovered but it is very evident as a result of the discussions of this subject that ether continues to hold a major position in the

practice of most men in South Carolina as a dependable anesthetic. Another paper discussed at this meeting was one on medical economics. The subject created great interest in the society. The literature of all medical societies and many of their programs contain an increasing number of contributions on this subject. It is of world wide importance and every county medical society for the next year or two at least should have a paper on the subject at least quarterly. In the discussion at the Third District meeting one prominent member stated that he had increased his income thirty-three and one-third per cent in the last two years by the simple expedient known to all men but not adhered to by doctors generally of sending out his bills promptly on the first of each month. The significant thing about this statement is that the doctor has put this plan into execution during the so called great depression period. If every doctor in the State should at once adopt this sound business principle and get the same result a marvelous improvement in the economic status of the profession in South Carolina would be at hand. Suppose we try this simple plan and see what happens.

We are beginning in this issue of the Journal a new Department under the editorial management of Dr. J. I. Waring of Charleston. Dr. Waring has an enviable reputation in national journals for his able contributions, especially, along historic lines. He will undertake the abstracting of papers published by South Carolina doctors anywhere in the world. He will also make a note of contributions of a medical nature by other authors if they have a bearing on South Carolina medicine. Dr. Waring will have the splendid library service of the Medical College of the State of South Carolina at his command. The college has constructed a beautiful new building and the equipment has been enlarged and the service will be extended. It is highly desirable that friends of the Journal in all parts of the country communicate with Dr. Waring when anything of special interest to his Department comes under their observation. We shall be glad to have our readers drop a card to Dr. Waring with comments about the new Department. Editors are

really human after all and a cordial message is always welcome.

Attention is called in another part of this issue to the plans of the Committee on Public Health of the State Medical Association. A major interest will be taken in the Child Welfare campaign to be prosecuted throughout the nation as a result of the White House Conference last fall and winter. Already many other plans by other organizations looking toward the same end are getting under way. The White House Conference clearly pointed out that medical men should everywhere be leaders in this proposition. We urge upon the members of the State Medical Association this great cause and bespeak their keen personal interest in it.

THE DEATH OF DR. C. W. KOLLOCK

Perhaps the passing of Ex-President C. W. Kollock touched more keenly the hearts of South Carolina citizens than is ordinarily the case. Dr. Kollock had lived more than three score years and ten, with a record equalled by few in any walk of life. His last illness was long and peculiarly distressing in many of its phases and yet borne with a fortitude surpassed by none. In looking over the official records of the State Association one finds that Dr. Kollock became a member in 1884. Immediately his interest in the affairs of the Association and in its scientific aspects became a part of his very life. He was soon a commanding figure at every meeting and honors came crowding upon him with unusual rapidity and the crowning glory of the Presidency in 1898. His Presidential Address on that occasion was far more than a duty perfunctorily performed. In it he summed up the wisdom born of knowledge acquired by long observation and close contact with affairs both local and national. His address was filled with pertinent suggestions for the welfare of the public and the profession, beginning with the smallest hamlet and extending to the state and the nation. It is significant in the life of today that he called attention to the fact that there were twelve hundred doctors in South Carolina although less than one fourth belonged to

the State Association. Today there are few more than twelve hundred doctors in the State but three fourths of them are members of the State organization. Then as now Dr. Kollock called attention to the economic conditions of the profession and of the violent action of the Legislature against appropriations especially for the State Board of Health. He noted that after much acrimonious discussion and defamatory remarks about doctors by some members of the Legislature to wit: that they could not differentiate between chicken pox and small pox, so the appropriation was cut down to one thousand dollars to protect the people of South Carolina from all forms of communicable disease. A marvelous change has taken place in respect to the appropriations for health protection which now exceeds a quarter of a million dollars annually from all sources. Dr. Kollock was vigorous in urging the principles of the code of ethics on the attention especially of the younger members of the profession. He also urged loyal support of the American Medical Association. He had recently returned as a delegate and had been appointed on the committee to raise funds for a monument to Benjamin Rush. During the Presidency of Theodore Roosevelt the delegate from South Carolina, participated in the unveiling of this monument in Washington by the American Medical Association. Dr. Kollock touched strongly on quarantine laws and the protection from yellow fever which had just been epidemic in New Orleans. He demanded that the shot gun quarantine by the individual cease and that saner methods be adopted. He urged against the antivivisection bill just introduced into Congress. The same situation has existed in a recent Congress. Dr. Kollock urged against the abuse of charity practice by the ever enlarging free clinics just as is the case today. It is worthy of note that many of the problems pointed out in this memorable Presidential address have been solved in a satisfactory way and yet many of them are still with us and just as acute now as they were then. Dr. Kollock maintained, as the record shows, through all the years a keen interest for the highest type of the practice of medicine and for an untarnished record on the part of every doctor.

In a sense Dr. Kollock was born to the

purple. His father was one of the South's most distinguished pioneer surgeons. His home life and his home environment in the cultured little town of Cheraw left nothing to be desired. The education of Dr. Kollock from every standpoint was ideal. At a time when short cut methods of training doctors were in vogue there was not the slightest thought of any such course for him. His premedical education was pursued at that splendid institution the Virginia Military Institute where he responded in a most admirable way to the high type of educational influence surrounding him there. From thence he matriculated at the oldest medical school in America, The University of Pennsylvania, from which he graduated in due time, and completed an extended period of internship in the best hospitals of Philadelphia, at that time the greatest medical center in the United States. Nor was this all of the preparation. Evidently he was early committed to a specialty, the eye, ear, nose and throat and this subsequent training was carried on extensively in the great Universities of Europe. Dr. Kollock early in his career located in the City of Charleston. It would appear that the opportunity of a life time awaited him to serve both the public and the profession in an extraordinary way. Dr. Kollock took up a specialty at a time when the highest honors were usually accorded the general practitioner. There were few specialists in the average good sized city and their activities were limited by the lack of appreciation on the part of either the profession or the public. Dr. Kollock, however came upon the scene in Charleston after having had unusual training and he rapidly forged ahead not only there but became well known throughout the South. In time he was recognized in numerous ways by many national organizations. Although early in his professional career the South Carolina Medical Association honored him with the highest office within its power, he continued to serve on numerous committees all his professional life. He rarely missed a meeting and participated in the scientific programs as well as in the House of Delegates. One of the most important changes in the Constitution, that of having the House of Delegates complete its work before the beginning of the Scientific

Session, was brought about largely through Dr. Kollock's efforts some twenty years ago. He never turned down a request for counsel or assistance by the officers of the State Medical Association and he was called on often.

Dr. Kollock was a man of remarkable personality, an unusual asset in any company. His military bearing, his quiet dignity, his keen sense of humor, his loyalty to his friends,

made him a conspicuous figure not only in a professional but in a social way. He never seemed to be even on the verge of growing old. Youth with him appeared to be perennial. Thus has passed one of the most remarkable physicians South Carolina has ever produced. Proper tributes will be paid to his memory and a more detailed description of his life and works at a later date.

COLUMBIA MEDICAL SOCIETY

Regular scientific meeting of the Columbia Medical Society called to order by the president, Dr. James S. Fouche, at 8:35 P. M., September 14, 1931.

Minutes of last regular scientific meeting read and adopted.

Under clinical cases Dr. Bunch reported a case of diverticulum of the appendix showing the pathological specimen to the members of the society. This case was discussed by Dr. Harmon, Dr. Taylor and Dr. McIntosh. Dr. McIntosh stated that he had removed a double appendix at the Columbia Hospital some twenty odd years ago.

The first paper of the evening was "Some General Ideas in Regard to Treatment of Fractures" by Dr. A. T. Moore who ably handled his subject advocating the open surgical procedures in a number of cases. The use of tetanus antitoxin was emphasized. The discussion was opened by Dr. Julius H. Taylor—further discussed by Dr. Hey-

ward Gibbes, Dr. Floyd Rodgers and Dr. Fuller of Greenwood. Discussion closed by Dr. A. T. Moore.

The second paper was "The Anti-Pellagra Campaign" by Dr. John B. Setzler. His paper was very interesting bringing out the point that as a result of their campaign the number of cases in the spring and summer of 1931 were reduced by half the number seen in 1930. Dr. Setzler thanked the society for their cooperation.

Paper was discussed by Dr. W. R. Barron and Dr. Richard Allison.

Dr. Fouche announced that Dr. William A. Frontz of Baltimore would be the guest of the society at their next scientific meeting October 12th, 1931.

Dr. Fuller and Dr. Scurry of Greenwood were visitors to the society meeting.

There were thirty members present and three visitors.

Respectfully submitted,
William Weston, Jr., Secretary.

PRESIDENT'S PAGE

By Charles A. Mobley, M. D., Orangeburg, S. C.

THE CONSERVATION OF HUMAN LIFE

No. 3. THE PERIODIC PHYSICAL EXAMINATION

In the commercial world at stated periods it is necessary to make an audit of the condition of the business in question to find out if it is in a healthy state. It may be found that a business tonic is necessary or even business surgery, the latter being the discontinuance of some part of the business is not paying its way

It is of even more importance to man that he pause at stated times and have a careful check of his physical condition. In this way minor conditions that might become of major consequence in the destruction of health are righted and the individual is continued as an asset to the world and not a liability.

The periodic physical examination is preventive medicine in its purest sense and we should continue to educate the public to take advantage of this means of conserving human life.

And while we are on this subject the question naturally arises: How many members of the South Carolina Medical Association have had a thorough physical examination in the past twelve months? We sometimes act as though we thought there was no mortality rate amongst doctors, that over-eating, and increased weight and abscessed teeth need no attention because we are medical men. Bacteria and toxins show no more respect for the tissues of the doctor than the tissues of a layman.

Let us all resolve to bring this matter before our patients and to practice what we preach and have a thorough physical examination once in a while. We are entitled to every day of health and happiness that it is possible for us to have and the periodic health examination may mean just that to us.

ORIGINAL ARTICLES

*THE AID OF X-RAY FILMS IN CONFIRMING THE DIAGNOSIS OF CHEST CONDITIONS

By W. G. Byerly, M.D., South Carolina Sanatorium, State Park

The Diagnosis of tuberculosis depends as we know upon (1) History, (2) Symptoms, (3) Physical signs, (4) X-ray Evidence, (5) Tuberculin Test, (6) Laboratory Tests, (7) Exclusion of other causes and in this paper I shall take up X-ray Evidence and try to prove that it is a very valuable aid in the diagnosis of chest conditions. It is now recognized that the proper taking of X-rays, preferably stereoscopic is a necessary procedure in the examination of the chest. Definite parenchymal changes are seen in nearly all instances of proved pulmonary tuberculosis. Absence of such changes demands other proof of the existence of the disease. Physical signs and X-ray findings are often at variance, X-ray findings may be definite where physical signs are negative or doubtful, and very rarely, definite tuberculosis may exist without demonstrable X-ray change. Usually the X-ray findings show up more than the physical signs and the classification of tuberculosis is based largely on the X-ray findings, but should be classified by the method revealing the greater extent or intensity.

There is probably no part of the body of which it is more difficult and more important to secure accurate X-ray films than the lungs. The difficulties chiefly result from the depth of the chest, from cardiovascular movements, and from the varying obstruction of the lungs by the chest wall and other structures. If the film shows clearly the fine detail of pulmonary vessels, a lesion of the lungs sufficient to be of clinical significance, whether or not productive of signs and symptoms, will rarely fail to be shown, and its progression or retrogression can be readily observed in serial exposures made at intervals of days, weeks or months.

The criterion, therefore, of the adequacy of a film and, much more, of serial films, is the accuracy and comparability of the shadows of the vascular arborization, by which can be judged the extent and direction of change of a pulmonary lesion.

Also to be completely successful and to guard against later relapse of the disease, especially pulmonary tuberculosis, treatment must be continued until all symptoms have subsided and until physical and serial X-ray examination show adequate healing of the lesions. So we see that X-ray films are not only valuable in making a diagnosis, but are indispensable in successful treatment by means of the serial X-ray examinations.

At this date, we have no Laboratory or X-ray technician at State Park and due to our inadequate facilities, I shall not be able to show any children's films as I had hoped. Prior to the first of this year, X-ray films were made occasionally, but since the first of the year, we have been able to get a single film routinely on every newly admitted white adult and a single film on many of the original patients. We realize the necessity of chest films on each individual but as yet have not been able to do this. Our only means of getting films on patients is through the courtesy of one of our physicians, who has numerous other duties besides, and through the kindness of one who has had training in laboratory and X-ray technique, who if asked, has willingly helped us in getting films, but who is not a member of the staff; and it is to these two that I am deeply indebted in putting across our X-ray program so far. All these films were made at State Park and practically all of them since the first of this year. We have X-rayed over three hundred and out of that number, fifty-eight have had no definite active clinical tuberculosis from their X-ray study.

Mr. J. J. H. adm. Nov. 7, 1928, age 26, weight 142. Gave history of bronchitis in March 1928. Claims hacking cough and loss of weight. Reports of X-ray films made by

*Read before the South Carolina Medical Association, Greenville, S. C., May 6, 1931.

two different organizations about this time; one as suspicious, the other as possibly tuberculosis. No X-ray studies made at Sanatorium. Physical examination showed on the right an occasional rale heard above and below the clavicle. Nothing definite on the left. He had some sore throat and complained of fatigued voice and this was thought to be tubercular so he was classified as far-advanced. Apparently more of his symptoms were subjective rather than objective. On January 9, 1931, he was only on twenty minutes exercise daily. On January 14th, he was re-examined and only an occasional dry rale was heard in his chest. Numerous sputum examinations had been negative and the re-X-ray at this time was interpreted as only suspicious of tuberculosis. His temp. was never over 99 during his two years and four months stay at the Sanatorium and his X-ray films did not show any active tuberculosis more than the original films, during his long contact and evidently enjoyed being taken care of by the State.

Miss M. S. adm. March 4, 1929, weight 108 highest. She was previously a patient at a County tuberculosis camp and came to the Sanatorium as a pupil nurse. An X-ray made March 7, 1929 does not show any definite tuberculosis, however, she remained as a patient having an occasional temp. 100 to 101, which usually came down within twenty-four to thirty-six hours and no record was made of any cause for it. Subsequent chest examination did not reveal any physical findings until May 1930, when a few dry rales were heard below the angle of the scapula on the right. These recurred in September 1930 and were also heard in front about the level of the fourth rib in the right and continued in these areas. In March 1931, another film was taken and this shows the same chest with an addition of having had a pleurisy on the right side sometime in those two years. The X-ray films show she developed her pleurisy during the two years that she was in the Sanatorium.

Mr. T. E. S. adm. March 16, 1931, age 23, weight 144 highest. He complained of frequent colds with nasal occlusion and pleurisy-like pains in his right chest with occasionally slight blood-streaked sputum for the past year. Temp. occasionally 100 occurring at any time in the

day. Was diagnosed tuberculosis in 1930. His physical examination showed both nostrils practically occluded, the turbinates infected and polypoid formation. After cough, both chests showed scattered dry rales throughout, somewhat inconstant and also some squeaks and wheezes. His admission X-ray showed nothing definite and his tuberculin tests were absolutely negative, and he was discharged as non-tuberculous.

Mr. J. L. B. adm. March 29, 1931, age 27, weight 208. His chief complaint was hemoptysis of about an ounce mixed with sputum in January 1931 on three different occasions. Susceptible to colds, temp. not over 99.6 and this not persistent. Physical examination showed on the right increase in whispered voice and prolongation of expiration in the apex in front and behind. On the left, after cough, inconstant dry rales in the base and midaxillary region. His 1-1,000 tuberculin test was negative and 1-100 about two plus. His admission X-ray showed the left costophrenic angle not quite as clear cut as the right and a slight area of increased density just outside the heart shadow margin, with the trunks slightly heavier in the left base. He left against advice before we had finished studying him. He is probably non-tuberculous, however, he should have had numerous sputum examinations and the subcutaneous tuberculin test in order to prove it conclusively.

Mrs. M. L. adm. July 11, 1930, age 23, weight 121. Claims that she had blood-streaked sputum in September 1921 and March 1930 some fever, amount unknown, and hot night sweats with some loss of weight. Had slight cough and scanty sputum. Physical examination did not reveal any definite findings in her chest but she was classified as minimal Tuberculosis. Her temp. was 99 to 100 in the evening but irregularly for a month. She had some blood-streaked sputum during July and August 1930. By September 1930, temp. was normal to 99, gained weight consistently to 135 pounds with no physical findings in the chest. Her X-ray film taken March 14, 1931 showed a slightly suspicious area in the first interspace on the left. She was given the tuberculin test and this showed a questionable one plus reaction.

Mrs. E. A. adm. August 9, 1930, age 30, weight 105, which was 13 pounds below normal. She gave a history of morning cough and very little sputum. She had chronic so called nervous indigestion, felt weak and tired and was subject to influenzal attacks. No living children but one dead and had had a so-called attack of psoriasis. Physical examination of her chest did not disclose any abnormal findings. Her temp. was 99 to 99.4 at P. M. and back to 99 or 98.8 at 7 P. M. She was classified as minimal tuberculosis. Her blood Wassermann revealed 4 plus and she was given appropriate treatment. She gained weight consistently to 122 pounds, on February 17, 1931, at which time an X-ray was made of her chest. It showed generalized thickening of the trunks throughout both sides and only suspicious of tuberculosis infiltration on the left within the circle of the first rib. Her tuberculin test showed only a questionable 1 plus reaction and she was reclassified as being questionable for tuberculosis.

Miss E. P. adm. March 31st, 1929. After she had been a patient at the State Hospital for about one month following a hysterical episode. She gave a history of slight hemoptysis February 1928. Strength was not good. Physical examination at that time showed impaired percussion note and some rales from apex to the third rib on the right. No rales on the left side. It was thought she had pleurisy with effusion at time of admission and classified as far advanced tuberculosis, but not X-rayed. She had some blood streaked sputum in April and May 1929 and temp. to 100 in the evening but not consistent until December 1929, then gradually down to normal. Occasionally temp. to 99.4 p. m. but has been symptomatically doing well. X-ray film made in March 1931 showed on the right probably a slight infiltration between the second and third ribs and trunks to the base thickened. On the left, the trunks, especially to the base, were somewhat heavy and their outlines woolly in appearance. Her tuberculin test was a good two plus. She was re-classified as minimal tuberculosis, and if she ever had far advanced tuberculosis she absorbed it well in two years.

Miss B. A. This lady was in her usual good health as far as she knew. She was tuberculin

tested in one of the clinics and this gave a three plus reaction. No physical findings were evident in her chest. She was advised to have an x-ray and the film showed a suspicious tuberculous infiltration within the circle of the first rib on the right and peaked diaphragm on that side also.

Mrs. E. P. adm. April 8th, 1931, age 26, weight 127, 11 pounds under normal. She gave a history of left sided pleurisy at times and slightly productive cough during the past year. She claims she was told early in the fall of 1930 that she had no tuberculosis. Her physical examination on the right did not reveal any abnormal findings, but on the left after expiratory cough there were dry and fine moist rales from the apex to the second rib. Her admission x-ray film shows on the right thickened pleura at the apex and slight tuberculous infiltration in the third interspace. On the left, definite infiltration from the apex to the second rib. If this patient does not do well, she should have artificial pneumothorax.

Miss D. C. adm. Sept. 28th, 1930. Age 17, weight 121. Claims that onset began with loss of weight and cough in May 1930. No known exposure. Tires easily. Physical examination showed no abnormal findings on the right. On the left, there were moist rales after cough. She has continued to have an evening temp. of 99.2 to 99.8 moderate cough and expectoration. Her x-ray film made April 9th, 1931, showed slight infiltration on the right side, especially in the apex and definite tuberculous infiltration throughout the left side. This patient should have the advantage of pneumothorax, although at her age and the amount of trouble present, the prognosis is doubtful.

Mr. C. B. K. adm. April 13th, 1931. Temp. 99.4, weight 129. Claims he had pleurisy in 1928 and was sick three months, but regained strength gradually and worked daily for a year. Then noticed return of cough and expectoration with loss of strength and weight and fatigue. He continued trying to work most of the time until two weeks before admission, with a gradual loss in weight to 18 lbs below normal. His physical examination showed on the right some increase in vocal fremitus and impairment of percussion throughout and limited expansion. There was slight increase in whispered voice

and prolongation of expiration from the apex to the second rib in front and at the level of the fifth thoracic spine behind. After cough numerous fine moist rales were heard over the chest in front and behind. On the left there was some faintness of breath sounds from the nipple to the base in front; after cough a few scattered moist rales over the whole chest more numerous just below the clavicle in front. The admission X-ray shows areas of cavitation and tuberculous infiltration on the right with scattered infiltration and peaked diaphragm on the left showing a far advanced lesion. The sputum is about four ounces in 24 hours and temp. 99.2 p. m. with a 90 pulse rate. Possibly this patient should have advantage of phrenic operation on the right side.

J. B. (col.) age 31, at usual weight giving a history of being sick for a week or two each Spring for the past four years with so-called malaria. He had some cough and expectoration since January 1931 and could not get well of this so-called cold. He was working as a dairyman for a state institution and had been at this for several years. Physical examination on the right showed scattered dry rales throughout. On the left percussion note was impaired about half way down the chest and definite increase and whispered voice in the apex. After cough moist rales were present from the apex to the fourth rib and to the angle of the scapular and dry rales from thence to the base. X-ray film made March 17, 1931, disclosed an old lesion with calcified areas, and a more recent active mottling on both sides more pronounced on the left with an area of apparent cavitation in left apex. He was immediately stopped from his work and later admitted to the colored division of the state Sanatorium.

Miss M. P. adm. Dec. 30, 1930, age 14, weight 66 pounds. Patient claims that she has had weak lungs since influenza at age of 3 years. She has a productive cough with greenish yellow mucopurulent sputum of about four to six ounces in 24 hours. There have been no sputum examinations. Usually temp. and pulse normal; occasionally 99.4 to 99 at 8 p. m. Has gained 14 pounds in the past four months. Her x-ray film made on March 14, 1931, showed a basal lesion on left which is not typical of

tuberculosis but may be due to that cause. She showed a three plus reaction to 1-1,000 tuberculin test. She should have repeated sputum examinations in order to arrive at a definite diagnosis.

Mrs. S. F. adm. Feb. 2, 1931, age 59, weight 157. Claims onset began following a so-called influenzal attack in 1929 and that she had a positive sputum in Dec. 1930. Physical examination on the right showed some limitation of expansion and percussion impaired. After cough some scattered dry rales. On the left no definite rales. Her admission x-ray showed very suggestive tuberculosis infiltration from the second to the fourth rib on the right, and a heavy hazy shadow of varying intensity towards the base. The right dome of the diaphragm is higher and peaked by adhesions. On the left, the trunks to the base are thickened and their outlines woolly in appearance. A 1-1,000 tuberculin test gives a very positive reaction. Six recent sputum examinations have been made. This is not typical of tuberculosis but probably is due to that cause. This case should have the benefit of the phrenicectomy on the right side.

Mr. E. R. was a patient in the Sanatorium in 1919 and did well at home until Nov. 1, 1930, when he began to have hemorrhages and was readmitted Dec. 7, 1930. Weight 141. Physical examination on the right disclosed medium coarse dry rales from the apex to the third rib and the apex to the seventh dorsal spine. On the left, a few dry scattered rales over the upper half of the chest in front and behind. He was not x-rayed but classified as moderately advanced. He had very few symptoms and in one month was sent to the ambulatory building. He gained weight to 168 pounds and was on 50 minutes exercise daily on March 31, 1931, with no symptoms. On April 2, he felt nauseated and was advised to stay in bed. Temp. varied from 100-102 until April 6 when physical examination disclosed fluid in the left chest. An x-ray film on April 14 demonstrated fluid in the left chest with the heart displaced slightly on the right. Due to dyspnoea forty ounces of straw-colored fluid was aspirated on April 19th. His temp. gradually came down with relief of symptoms. The x-ray in this case demonstrates a far advanced lesion with

very few physical findings complicated by pleurisy with effusion, so he had to be reclassified.

Mr. J. W. was a patient at the Sanatorium Jan. 1927 until Jan. 1928, then worked as a barber for a while and in Jan. 1931 had recurrent hemorrhages. Was readmitted to the Sanatorium April 2, 1931. The admission x-ray film shows on the right dense fibrosis surrounding an area of cavitation and scattered tuberculosis infiltration throughout both sides.

Miss P. S. adm. Jan. 15, 1928, age 28, weight 105, which was 20 pounds below normal. Had some cough and expectoration and temp. around 99 at 8 p. m. In Nov. 1928, after having gained 30 pounds, she had recurrent hemorrhages and pneumothorax was begun on the left side. This was continued for several months but was unable to keep the compression and pneumothorax stopped. Has been in bed since. Temp. is still at times 99.4. No hemoptysis during the past year. Physical examination shows impairment of percussion and scattered rales on the left. The x-ray film made April 9 shows apparently fibrosis throughout the left side with the heart displaced so that it is within this density. There is some infiltration on the right side. This patient gets along very well excepting that exercise causes dyspnoea.

Mrs. M. B. Oct. 31, 1929, weight 120 which is 15 lbs. below normal. Claims never regained health from so-called influenza in Jan. 1929. Had streaked sputum and cough during summer of 1929 with some fatigue. Physical examination on the right showed rales throughout that side and on the left from the apex to the third rib in front. Her temp. was 100-101 p. m. and this gradually came down to 99.4 p. m. within three months time. In March 1930 pneumothorax was begun on right side. This was continued until Oct. 1930 when the pleural space closed. Temp. and pulse practically normal. She was x-rayed on Jan. 24, 1931 and due to the fact of a cavity in the right apex which was still open, we decided to try the phrenic nerve operation. This was done on Feb. 18, 1931 and re-x-rayed on March 28 shows a rise of the diaphragm on the right side and apparently some closing on the apical cavity.

Miss G. J. adm. March 13, 1925, weight 101 which was 19 lbs. below normal. Claims that illness began with hemoptysis in Feb. 1916. Physical examination showed rales over the whole right chest and roughened breathing in the left chest. She began pneumothorax May 1925 and with the exception of a few flare-ups at times, runs normal temp. and pulse and feels good and is doing light work. The x-ray made recently shows a good collapse of the right side. She is apparently getting along ideally with pneumothorax.

F. B. (Col.) age 28, Wassermann negative, cook in a state institution, no symptoms, and in his usual health. History of trauma to the left chest many years ago. Physical examination revealed limitation of motion and flattening of the chest on the left with impaired percussion throughout. Breath sounds were faint, no rales were heard. The x-ray film showed an abnormal density in the left chest not typical of tuberculosis. This probably resulted from hemothorax from the injury and thickened pleura. There seems to be a basal lung involvement also. This case should be thoroughly studied before a definite diagnosis can be made.

Mr. L. B. adm. Nov. 11, 1929, weight 155, which was his normal weight and present weight is 148. Was sick in 1923, rested a year, recovered apparently and worked until Sept. 1928 when he had pleurisy and fluid was aspirated elsewhere from the left side but the amount and findings in this fluid are not known. At the time of his admission he had very little cough and expectoration occasionally some sputum and night sweats with some temp. but the amount is unknown. His examination at that time disclosed no rales in the right side and on the left side breath sounds were diminished over the whole lung with a few rales above the spine scapula and diagnosis of far advanced tuberculosis and pleurisy with effusion was made. No x-ray film. His present examination showed impaired percussion and absent sounds on the left side. About an ounce of bloody fluid was aspirated in February 1931. His tuberculin test of 1-1,000 dilution showed about 1 plus. The x-ray film made a few months ago shows a density suspicious of tuberculosis in left apex and a large mass in the

left chest. This is probably not tuberculosis from the x-ray but there is a difference of opinion among the staff about this case.

Mrs. H. Film No. 310, shows an enlarged heart.

DISCUSSION

Dr. S. E. Lee, Greenville County Sanatorium, Greenville, S. C.:

Dr. Byerly has so well demonstrated the use of the x-ray in diseases of the chest that there is very little left for me to say. There is one point, however, that I should like to bring to your attention, and that is the diagnosis of tuberculosis in children. There is absolutely no way to diagnose tracheobronchial tuberculosis of children without the use of the x-ray. We found in the North Carolina juvenile clinics that 1.63 per cent of the total number examined or tested had clinical tuberculosis. The way we find these cases is by the use of the x-ray in positive cases. These cases are found, first, by the use of tuberculin in a diluted form, 1:1000; second, the history; third, physical and laboratory examinations; fourth, the x-ray, anteroposterior and oblique studies. The x-ray is absolutely indispensable in the diagnosis of childhood tuberculosis.

Dr. T. A. Pitts, Columbia:

A few years ago the roentgenologist was inclined to be a booster of his wares, to give statistics in support of his efficiency. Now we find the referring physician and the patient leaning slightly too much on the x-ray film for diagnosis. I should like to impress upon you one thing I am convinced of; that is, that the x-ray in tuberculosis—pulmonary tuberculosis—is of more value in finding out the presence and distribution. After you have found the distribution, and if you come to the conclusion that it is a tuberculous involvement, it is outside the realm of the x-ray man to say whether it is or is not active. This is a clinical proceeding. There are a few exceptions; there are no rules in medicine which are one hundred per cent perfect. We can sometimes, in tuberculosis, surmise activity fairly accurately by the x-ray. In finding a lesion of the chest, if it is in the upper portion of the lung, it is tuberculosis until it is proven otherwise; if you find it in the lower portion, it is not tuberculosis until it is proven to be. The chest should be divided so that you can study the apices, the periphery, the bases, and the hilum. Practically every adult has heavy hilum marking, which the man who studies few x-ray plates is apt to lay too much stress on. A shadow at the hilum that would be dismissed would be highly significant at the apex; if the same shadow is distributed to the base, we

first consider bronchiectasis or something of that type.

I think I have no point more important than to stress that active tuberculosis can not be accurately diagnosed by the x-ray in one hundred per cent of the cases.

I enjoyed Dr. Byerly's presentation and the discussion and appreciate your attention.

Dr. Byerly, closing the discussion:

I am certainly grateful to the gentlemen for discussing the paper. I wish to thank Dr. Pitts for bringing out the points he did, because it helped to make clear to you gentlemen the areas and the amount of trouble in the chest.

There is just one more film I want to show, one of a pneumothorax case. This patient has been taking pneumothorax now for about six years and getting along very well doing part-time work.

I thank you.

*SELECTIVE STERILIZATION

By B. O. Whitten, M.D., Superintendent State Training School, Clinton, S. C.

The records of history reveal convincing evidence that racial development continued for hundreds or thousands of years upon a plan of the survival of the fit. The intervening hand of charity has instituted a reversal of that evolutionary process. The practice of eugenics in some crude and awkward, probably inhuman manner, antedates historical data by legendary reports of Queen Semiramis of Nineveh having certain males castrated to prevent deterioration of the race. The Spartans developed an unusually sturdy race by enforcing upon all their people certain physical tests for endurance, in consequence of which the weaker strains would perish. The Romans placed weaklings upon the mountains or cast them into the River Tiber to perish, because of their unfitness. Reports of the thirteenth century tell of thieves in Palestine having been castrated to prevent their begetting sons like their fathers. Of all the triumphant marches of the vanguards of science, those floating banners for racial betterment have taken fewer strides forward, and sometimes we are painfully conscious of an actual retrogression. The feelings of revulsion resulting from methods employed during the many ages past seem to have forced

*Read before the South Carolina Medical Association, Greenville, S. C., May 7, 1931.

the pendulum of benevolence, social approval and public consent far from the meridian and on the side where charitable silence and passionate regard for weaker beings have inhibited the force necessary for its movement in opposite direction. The word eugenics, a derivation from the Greek "eugenos," meaning well-born, implies a feeling of stimulation and carries a forceful inspiration for improvement and uplift. The instincts for self-preservation and self-perpetuation are natural endowments and no attempt should be made to circumvent those instinctive functions except in cases where the best interests of society and the individual easily take precedence over them. I have kept silent for several years, hoping that I might speak out of the fullness of experience. At least, I have had fifteen years observation, commingled with a bit of study, upon which to base opinion. In discussing sterilization, I cannot make concessions to your passion for knowing just what might be the biological result in each and every case. It is a subject that challenges us to become interested in a situation that we actually have, the probabilities in the future, and not just the possibilities of the outcome of a few isolated cases. Heredity is a subject still big enough and fraught with mysteries sufficient for many years discussion and scientific investigations in the future. It is too big for one to get started upon within fifteen minutes. Its laws of germ and sperm, and its closely related laws of sanguinity cannot be dealt with at this time. Such discussion, therefore, is dispensed with by use of the following dictum: We do not gather grapes of thorns. Reports of Beech and Suttleworth in a study of 5430 cases show that the strongest pre-disposing cause of the conditions found was hereditary transmission of defects or combinations such as to produce them. Tredgold, after years of painstaking research, sets neuropathic inheritance at 82.5 per cent. "Again and again," he says, "I have discovered by a little questioning a well-marked history of insanity of which no record whatever existed in the case books." The cost of mental diseases and deficiency should not and cannot be estimated in dollars. The annual cost to our nation is said to be approximately one billion dollars, and this does not include

the cost of crime. It is second to education. More beds in institutions are being occupied by such cases than all other cases of illness combined. We do not know exactly how many insane, epileptic and defectives there are in our state. Probably one out of every twenty will at sometime during life become an inmate of the State Hospital. I believe 90,000 is a conservative estimate of the number of people in our state who have not more than 70 per cent of normal intelligence, according to accepted standards of measurement. Thousands of these, in fact most of them, do not need the care of an institution and may get along in a fairly acceptable way, but they are certainly incapable of handling the complex problems of society and represent mostly a non-productive element. A disproportion of delinquents and an overwhelming number of dependents are recruited from their ranks. The indictment is against us and not them, however. As a rule, the birth rate among them far exceeds the average found in families of higher ranks of intelligence. They not only penalize society but visit the same penalty upon their own offspring. Statistics indicate that families sending children to institutions for defectives average twice as large as those sending children to universities. What should we do, if anything? If science has not revealed sufficient light for intelligent action, we might deal in the light of actual conditions. Some of our methods during the past have certainly created the very essence of degeneracy. May we pass laws prohibiting marriage of mentally unfit? A very good step in eugenics but it will by no means stop propagation of thousands of defectives and dependents. The Utopian plan of institutionalizing all such undesirable citizens during their ages of reproduction offers a pleasing answer but no logical solution, because of its prohibitive cost. Or, shall we continue breeding mostly from the bottom and make some vain endeavor to become the master of our fate? The title of this paper is, of course, offered as one of the methods for eugenical development. It is not regarded as a cure-all. Were such a law enacted, and put into operation, there would still be hewers of wood and drawers of water, some incompetents and dependents. You continue to have

cases of typhoid fever, although you have at your disposal an excellent remedy for preventing it. It is scarcely probable that selective sterilization as a means of eugenics will find strong and serious objection in our state when the methods and purposes of its administration are fully understood. Those having defective children or near relatives should be the ones most concerned about it. I have had many conferences with such people and found no antagonistic feelings toward it. Obviously, there are few defectives who have sufficient insight or foresight to recognize its need or countenance its operation. Even in this case, however, if patients can be made to see the great danger and difficulties of trying to raise and train defective children, they will prefer sterilization to propagation with its consequences. It is also true that poor germ plasma is scattered throughout the country but no one should challenge the statement that sane and competent people do not wish it to be in the blood of their children or their children's children. Selective sterilization should bear no relationship to an act to penalize the subject. It will not prevent the birth of genius, except in extremely rare cases. The brightest school children in California were recorded, and 502 pairs of parents of such children studied. Only two fathers and two mothers had been insane and practically no trace of deficiency was found in any of the parents. Is not the birth of thousands of bright children prevented every year by the use of contraceptives?

Vasectomy, under local anesthesia, and salpingectomy, under general anesthesia, are at present considered the most desirable means for accomplishing sterility. The use of radium x-ray and cauterization of tubal orifices in females cannot, at present, be recommended. The operation is more easily performed after the organs incident to the age of puberty are fairly well developed. There is little truth in the statement that sterilization will stimulate promiscuity,—somewhat the reverse when employed in connection with proper training, and parole. Nor does it appear to lessen a feeling of responsibility and social adaptability. Relief from strain, and the chances for economic success far exceed any disadvantages of the possibility of becoming stigmatized by the op-

eration. The effect on the sexual life may be determined in a few cases by the suggestibility of the person. Practically speaking, there is no change whatever in the function of any sex organs except the prevention of reproduction, because no organs are removed from the body except small sections of the tubes and vasa. Operations for vasectomy by Dr. Harry Sharp of Indiana in the year 1899 was the beginning of eugenical sterilization in the United States. This, however, was not legally sanctioned by the state. Pennsylvania passed the first sterilization law in 1905, but it was vetoed by the Governor. California passed the law in 1909 and has on record over 6,000 state institutional cases and several thousand private cases of eugenical sterilization. The United States Supreme Court in 1927 upheld the decision of the Virginia Court declaring the constitutionality of the Virginia sterilization law. In handing down his decision, Justice Holmes of the United States Supreme Court said: "Three generations of imbeciles are enough." We have on record four generations of imbeciles in South Carolina and three generations of them are now at the State Training School. Sterilization laws are now on the Statute Books of twenty-seven states. Some of the more pertinent questions regarding the usefulness and necessity of such laws are: Is mental deficiency hereditary? Is it a menace to the progress of social, physical and economic welfare of our state? Is sterilization a practical, effective and humane method for lessening the existence and propagation of deficiency and dependency? This is a subject requiring very careful and conscientious thought. The matter should be handled so as to show conclusively that the welfare of the individual and the good of the state are paramount and that no attempt will be made to enforce or inflict upon any person the slightest degree of punishment or disregard for their rights and well-being. The case records given in this paper are possibly a bit outstanding but many others, equally significant, might easily be selected. One question we should face is: Shall we segregate all such cases throughout their reproductive periods or return them to social life in the communities incapable of procreating or allow them to produce children that would naturally and logi-

cally be dependent and defective? Does South Carolina need more citizens so badly?

CASE No. 1.—Joseph----- Born in Laurens County almshouse. His mother, while an inmate of the almshouse, attempted to burn the building in which she was being kept. She and the child were admitted to the State Training School on March 6, 1923. His present age is 10 years. Mother has been in almshouse and State Hospital several times. Married but husband deserted her. Joseph's grandmother admitted to State Training School on June 21, 1921. Was never married. Had eight illegitimate children, two of whom are inmates of the State Training School; another was an inmate of Boys Industrial School and is known to be defective; another daughter is a known defective, married, has children, last known address Ware Shoals. The great-grandmother of Joseph died in the Laurens County almshouse, is known to have been mentally deficient and before being lodged in the almshouse, was maintained partly by gifts from sympathetic neighbors and friends.

CASE No. 2.—H----- One sister, two brothers now inmates of State Training School. Another brother formerly an inmate here. Another brother formerly an inmate of Boys Industrial School. Other children cared for by Red Cross and Child Placing Bureau for number of years. Mother of these children now married, seven illegitimate and dependent children before marriage. All members of family have speech defect. Father of two children was cousin to their mother. According to the mother's report, five fathers represent the seven illegitimate children.

CASE No. 3.—L----J----- Transferred from State Penitentiary 1921. Convicted of poisoning her husband. History of dissolute life for many years. One child born at Institution on August 12, 1922. Conception took place either in county jail or penitentiary shortly before she was transferred to State Training School.

CASE No. 4.—Marie----- Came from county almshouse, January 31, 1925. Husband also inmate of county almshouse. One son in State Training School. Two other children known to be public charges. Husband epileptic and defective.

CASE No. 5.—Maggie B----- Admitted September 30, 1928. Husband in penitentiary, said to be mental defective. One child in State Training School and applications for three others. History of insanity among many of relatives. Also, children of husband's brother on waiting list of State Training School.

CASE No. 6.—Essie----- Admitted to State Training School on January 23, 1923. Brother, admitted August 11, 1923. Father admitted August 3, 1923, died in Institution. All transferred from State Hospital.

CASE No. 7.—Mabel----- Admitted to Institution on December 24, 1929. One child in Institution, three in Carlisle Courtenay Home, one in orphanage in another state. She now has carcinoma of the stomach and baby is undeveloped and subnormal. Husband mentally incompetent, shiftless and penniless.

CASE No. 8.—Beulah----- Admitted March 22, 1930. Unmarried. One child in Institution and another a charge of Spartanburg County. Both children thought to be the immediate offspring of their grandfather.

CASE No. 9.—Maggie----- Admitted December 20, 1920. Unmarried. One child in Institution. One other child born before her admission here. Her father quite nervous and highstrung. Father's uncle insane. Her sister and aunt mental defectives.

CASE No. 10. Three sisters, two brothers, inmates of State Training School. Father several years in penitentiary. Applications state that both parents mentally defective. Mother re-married while father in penitentiary. Mother still giving birth to children.

CASE No. 11. Five brothers, one sister in Institution. Father and father's sister deficient. Applications state that all mother's people were mentally deficient. Father died and mother re-married. She is known to be mentally deficient and Institution has application for her admission here.

Many other cases of similar importance, eugenically, both in and outside the Institution have had our attention. I think the doctors, by giving proper information to the people, can render great service to public welfare.

Should the medical profession of South Carolina, at this time, or after further study of

the subject, register an opinion with reference to a form of legislation that would, in time, mitigate some of the conditions cited and promote eugenical development of the human race in our state?

DISCUSSIONS

Dr. F. M. Routh, 1512 Marion St., Columbia:

Dr. Whitten has brought to our attention this morning a very important subject, and I think it is a subject that the physicians of the state should be interested in. Other than social-welfare workers, the physicians know more about this subject than any other class of citizens; probably they know more than the social-welfare workers. Certainly we are in position to teach the importance of the subjects which Dr. Whitten has brought to our attention. I think when we remember such cases as the Kallikak family, in which, from one woman and this Kallikak man, there were 480 descendants, only 46 of whom were normal. This man subsequently married another woman, there being 490 descendants from this marriage, only one of whom was known to be defective; and when Dr. Whitten speaks of the four generations of known defectives and delinquents in South Carolina, certainly we must realize that we do not need any more such people as that; and I think we should take to heart this message which Dr. Whitten has brought to us this morning and immediately begin work upon the General Assembly. You know the history of such legislation in our state is that you have to pave the way and work very carefully for several years. I am sorry that such a bill as Dr. Whitten proposes was not introduced this year, but I do hope one will be introduced next year. You have to use propaganda in order to sufficiently influence the legislature. I have talked to some of the members, and they agree that it is a good thing, but they add some "buts" to that.

Now, as to mental defectives there is, of course, no question. There may be some question as to certain forms of insanity, because it is well known that many insane recover and become useful citizens again. Sterilization is the most effective way of solving this problem.

I hope you will go back home and begin this propaganda now, particularly with the object of teaching the members of our General Assembly the importance of this particular thing.

Dr. Whitten, closing the discussion:

"I should like to say that in giving the case histories, we do not make any claim to having given a complete history in each case. There is no telling how far we could trace some of these nor how startling the facts they would reveal if we had the means with which to do it. I am very confident that it would bring out some informa-

tion more striking than has been revealed by a study of the histories in our possession.

With regard to the attitude of the medical profession, I am reluctant to attempt any imposition of my personal views. I began some ten or fifteen years ago to study the subject and, naturally, see many more striking cases than most of the members of our profession. When a poor defective woman comes to the Institution with a little scrawny baby in her arms, I feel that the baby should never have been born. Our regard for the sacredness of human life, of course, compels us to nurse the baby to health and strength, but when it is released, after years of care and training, we expect to take care of some of its children or perhaps the same individual again, in the future.

With reference to legislation, we drafted a Bill on sterilization and almost got it to the point of introduction, at the last session of the General Assembly. The Legislature is somewhat timid about the subject and would really like to know the attitude of the medical profession, feeling that this is a medical-legal question. I am not speaking very specifically about insanity. I shall leave that part of the subject for my friend Dr. Williams to discuss. We feel that there is a close relationship between mental deficiency and insanity. Many of our case histories give striking proof of that fact."

SPONTANEOUS RUPTURE OF HYDRONEPHROTIC KIDNEY. CASE REPORT

Dr. Douglas Jennings and Dr. L. R. Kirkpatrick, Bennettsville, S. C.

A white man, age 32, undertaker's helper by occupation, was admitted October 2nd, 1931. He was taken sick three days before admission with acute colicky pain in the right loin radiating to the iliac region and bladder, accompanied by hematuria and nausea with vomiting. The pain had been relieved by opiates but the hematuria continued without let-up and was very free. The nausea and vomiting had not ceased for three days. There had been no fever. A few hours before admission this man was seen by the referring physician who found the patient in extreme pain, very pale, vomiting continually, and apparently in great shock. He was sent immediately to the hospital by ambulance.

He had had the usual diseases of childhood and repeated attacks of malaria. Had never

had typhoid, pneumonia, scarlet fever, rheumatic fever, gonorrhea, or syphilis. Had influenza in 1926 with complete recovery. About twelve years ago had an unexplained hemorrhage from the bowel. For past ten or twelve years had suffered with right-sided lumbar pain, accompanied by hematuria, and appearing at frequent intervals in attacks lasting a day or two. Had backache all of the time. With the last attack of this colic he was admitted to this hospital where a diagnosis of renal calculi was made—he passed a small stone then and was relieved. At this time nephrectomy was advised because of x-ray evidence of a large kidney and many stones. This was refused. The habits are good. Never drank whiskey and smokes only occasionally.

Physical examination showed temperature 98, pulse 150 and irregular, respiration 32, blood pressure 96/70, weight usual 130, present about 115. Fairly well developed, undernourished and wasted, completely shocked, pale, cold, and grunting in pain. Scalp negative, pupils equal and active, sclera yellow-tinged, conjunctiva very pale. Tongue dry and furred, gums badly infected, teeth show numerous cavities and much decay. Tonsils moderately hypertrophied. No glandular or thyroid enlargements. Chest expansion full and equal on two sides, lungs resonant throughout, no rales or change in the breath sounds. Heart normal in size and position, no murmurs. Radial pulses equal and irregular in rate, volume and tone poor, rate 150. The entire right side of the abdomen is very tender and rigid. The tenderness extends around over the right kidney in the back and is marked over the bladder in front. No masses are palpable in the abdomen but the rigidity prevents accurate palpation. The genito-urinary organs are negative externally. Bones and joints show no swelling or tenderness. Neuro-muscular system negative.

Urinalysis impossible because of the fact that the urine is loaded with red blood cells. The hemoglobin 30 per cent (Sahli), leucocytes 7,400; polys 67 per cent, lymphs 25 per cent, eosinophiles 6 per cent, transitionals 2 per cent. Blood urea 24.8 milligrams per 100 cc. Kidney function 20.4 but not accurate as some of the phenolsulphonphthalein was wasted in the tissues around the vein. X-ray examination in

June (on the previous admission) showed numerous areas of density in the right kidney which are evidently stones, very large ones in the kidney pelvis and smaller ones in the kidney substance. X-ray examination on this admission shows the left kidney somewhat enlarged, the right kidney extremely enlarged and containing many large and small stones. The lower pole of the kidney shadow is below the iliac crest and the upper pole extends to the liver shadow above, the mass completely fills the right side of the abdomen. One stone appears to be out at the margin of the kidney shadow at the right. Evidently this is a hydronephrotic kidney with many calculi.

Operative findings: The abdominal route was chosen because it was thought that the mass was too large for removal by the lumbar route. There was no peritoneal fluid. There was much ecchymosis and larger hemorrhagic areas throughout the mesocolon and cecal walls under the peritoneum. All retroperitoneal tissues on the right side showed an immense dark hemorrhage. A large soft mass filled the right loin from the liver above to the pelvic brim below. The kidney, after removal, was much enlarged, cystic, contained numerous stones, and its upper two thirds showed a large ruptured cyst. The entire mass was filled with dark fluid blood and blood clots with some urine. The ureter was widely dilated. The bladder was filled with blood clots but no stones were palpable in the bladder.

Pathological findings (Dr. K. M. Lynch, Charleston, S. C.) Diagnosis (after gross and microscopical examination) HYDRONEPHROSIS, NEPHROLITHIASIS, CHRONIC PYELITIS, SPONTANEOUS RUPTURE AND HEMORRHAGE. Pelvic wall markedly dilated and thickened, lining covered by granular material with numerous small stones. At the upper pole is a communication between one of the pockets of the pelvis which has a very thin wall and a large sac filled with blood clots, the wall of which is apparently constituted of kidney capsule and peri-renal tissue. This is not a polycystic kidney but a hydronephrosis with spontaneous rupture and hemorrhage. Spontaneous rupture of hydronephrosis is very unusual.

PUBLIC HEALTH

By B. F. WYMAN, M. D., Director of County Health Work, Columbia, S. C.

PELLAGRA CLINIC

OCONEE COUNTY HEALTH DEPARTMENT

By *T. G. Hall, M.D., Director, Walhalla, S. C.*

The problem of pellagra in Oconee County South Carolina is one of considerable magnitude. A Pellagra Clinic was held in the County Health Department on August 12th by Dr. James A. Hayne of the South Carolina Board of Health, and Dr. C. V. Akin of the United States Public Health Service.

Oconee County is the westernmost tip of the state. A portion of it is mountainous. The land area is 650 square miles, with an altitude ranging from 500 to 2,000 feet, and a population of 33,000 people. The streams are rocky and shallow but furnish a small amount of fish and there is abundant water power. Five cotton mills are operated in the county. The soil is rich and the crops are varied. It produces some of the finest apples in the state. The Nantahala National Forest takes in a part of the mountainous section.

Sixty-five pellagrins attended this Clinic, all white except two who were negroes. Farm Tenants and textile workers made up the larger portion of this number. Pellagra is a countywide disease. Grouping these cases according to age, the highest per cent was between the age of thirty and forty years or at the peak of their earning power. The youngest was a child of five years while the oldest was a woman sixty-five.

Among the clinic findings it was ascertained that many of these patients were subject to recurring flare-ups, and the lives of children and adults jeopardized as a direct result of neglect. The disease affects one's earning capacity, and economic barriers prevent continuous medical care and supervision; time passes and patients expect a little treatment now and then to control the tendency of their disease to grow worse. All of these cases had suffered from a few months to several years. Some were receiv-

ing no treatment whatever, with others treatment was so irregular that it was almost ineffective. Those treated by local physicians obtained desirable results for the period of time that they were being treated but in many cases the doctor was unable to affect a cure because of long intervals between when they slipped away from his care without further treatment or observation, drifting into a state of chronic neglect since they were unable to provide a proper diet, or medical treatment, consequently, failing to see the results for which they had hoped.

Without this Clinic many patients would not have come under medical supervision and advice at least for a time, nor would they have been followed up and the trend of their disease noted, with the urge that they keep under the observation of their physician until a complete recovery was brought about; neither would they have received educational literature on pellagra nor advice on diet and hygienic living.

Brewer's Yeast is sold through our Health Department. The increased amount of this yeast advised by local physicians to pellagrins has increased the number of office contacts. Most cases take yeast, many take it spasmodically or as they can afford it. More cases would come to our office if it were not that a grocery store in the county handles Brewer's Yeast also. It is given free through our Health Department to extreme cases of poverty, and sold to all who can pay for it. A careful record of every name and address of pellagrins contacted is kept in the County Health Department. New and old cases were reached for the Clinic through posters, press publicity, personal interviews, letters, physicians, and surveys.

The cooperative endeavor of the local physicians of the county with this Clinic was manifested through the number of cases that they sent to it, and by Doctors E. A. Hines, Sr., B. F. Sloan, J. W. Bell, W. W. Watkins and

J. W. Wickliffe with Barber Wickliffe a medical student, visiting it.

Pellagra offers a tremendous field in preventive medicine. It is a problem of economic significance. Serious steps are being taken to prevent its inroads upon the health and efficiency of the people. This is accomplished through education which includes instruction in diet and urging cases to put themselves under the immediate care of their physician, intensive case-finding, and follow-up work.

We are not yet in control of the pellagra problem but it is being handled in a progressive manner. The Oconee County Health Unit is operating in full sympathy with this work. If our hopes are to be fully realized it means that both preventive and curative medicine must give more than a passing thought to the problem.

The good results of pellagra clinics are sufficiently definite to emphasize an added obligation on the part of the United States Public Health Service in the matter of examining and advising pellagrins. The favorable reaction and response of the people to a Pellagra Clinic has been interestingly demonstrated.

At a special meeting of the Public Health Committee of the South Carolina Medical Association, held in Anderson, South Carolina, on September 8th; the following members being present—Dr. E. E. Epting, Chairman, Dr. B. F. Wyman, Dr. E. A. Hines, Secretary and Treasurer, President Mobley and President Elect Young; it was decided to discuss in the South Carolina Medical Journal the White House Conference.

In this preliminary statement we wish to quote from Ray Lyman Wilbur, M.D., Secretary of the Interior, as follows:

"Civilization has gone forward with a sud-

den spurt since it began to use science as the basis of its agriculture and industries. Medicine has advanced with equal strides, but there has not been even distribution of the benefits of all that we have learned to the children of our country.

"The White House Conference on Child Health and Protection is to make a survey of our children, to study the forces influencing them, and to try to chart out the wisest courses possible in our future management of youth. There is a duty that maturity owes to youth which can only be carried out by the fullest use of existing knowledge. . . . The White House Conference must not only gather information, but it must develop methods for communicating it to those in every part of our country, so that an interested and informed citizenship will unite in the solutions of the many problems of childhood.

"Through our own endeavors we have changed and moulded the environment of our children. They need guidance so that they will prosper instead of suffer. Most vital of all is the need of realizing that we can not escape the biological requirements we face as living human beings. We can no longer allow the large margins of safety which our bodies possess to care for the changes we must meet. We must deliberately plan together for the steps that lie ahead."

In future issues of our Journal more detailed information will be had as to this Conference. These discussions will be grouped under four main sections:

Medical Service

Public Health and Administration

Education and Training

The Handicapped

Particular attention will be paid to the part that the Medical Profession plays in this most important work.

SOUTH CAROLINIANA

J. I. Waring, M.D., Charleston, S. C.

In order that the profession in the State may keep in touch with the medical activities of its members, the editor of this department will endeavor to locate and abstract briefly articles by South Carolina physicians and papers dealing with South Carolina medicine old or new. For the remainder of this year the various publications which have appeared during 1931 will be included, and thereafter papers will be abstracted as they appear in journals other than this one. The editor requests that reprints, and if possible, brief abstracts be sent him, especially when papers touch technical heights beyond the reach of his ordinary medical comprehension, or, at least, that his attention be called to publications, so that the medical left hand may know what the medical right hand is doing in writing.

J. I. Waring.

77 Rutledge Avenue, Charleston.

Pulmonary Asbestosis—K. M. Lynch and W. Atmar Smith, Charleston. *Amer. Rev. of Tuberc.* 23, June, 1931, p. 643.

The comparatively few articles dealing with this subject are found chiefly in English journals. This is the second contribution by these authors, and includes a survey of cases reported by others, and a complete clinical and pathological report on a patient who had worked many years in an asbestos factory. The necropsy is apparently the first of its kind to be reported in this country. Roentgenograms, microscopic sections and illustrations of the asbestos bodies found in the sputum complete this interesting description of a disease which has been doubtless heretofore confused with fibroid tuberculosis.

The absence of toxemia and tubercle bacilli was noticeable in the case reported. Fibrosis, emphysema, bronchiectasis, hypertrophy of the right heart with eventual degeneration and failure were the developments.

Fracture of the Os Calcis—J. Warren White, Greenville. *Sou. Med. & Surg.* 93, Mar., 1931, p. 184.

Dr. White describes the technique of his method for securing union of this fracture by double skeletal traction. He uses spinal anaesthesia and places one pin in the os calcis, another in the tibial crest, then applies traction and plaster.

Indications and contra-Indications for the Removal of Tonsils in Children from a Pediatric Standpoint.—Dr. Lesesne Smith, Spartanburg. *Sou. Med. & Surg.* 93, Mar., 1931, p. 160.

Quoting the significant work of Kaiser and others, Dr. Smith adds the weight of his experience to the growing bulk of suspicion that the current furor for almost routine tonsillectomy is not justified by results. He points out certain definite indications for operation, which can better be recommended by the pediatrician than by the laryngologist.

Thyroid Physiology—Edgar A. Hines, Jr., Seneca. *Va. Med. Monthly*, July, 1931.

Dr. Hines recounts briefly some of the epochal discoveries relative to this subject, and discusses the physiology of the thyroid and its interrelationship to the other endocrine glands.

A Nutritional Research in the South—Roe E. Remington, Charleston. *Sou. Med. Jour.* 24, Jan, 1931, p. 49.

An illustrated article discussing the factor of geographical situation in relation to nutrition. Figures are given to refute the current idea that a degree of anemia is normal in sub-tropical climates (e. g. South Carolina), to show that iodine is more prevalent and simple goiter less frequent in the Piedmont section of this state than in the coastal region, and to show the content of calcium, phosphorus, iron and copper in various common foodstuffs. This

paper touches on several conditions of great clinical importance.

William Charles Wells, Printer, Philosopher, and Physician—Robt. E. Seibels, Columbia. *Sou. Med. & Surg.* 93, July, 1931, p. 538.

Dr. Seibels describes the life and writing of Dr. Wells, Carolinian by virtue of birth and an apprenticeship under Dr. Alexander Garden, educated further in medicine abroad, loyalist and printer during the Revolution, practitioner in London afterward. Wells gave the first exact explanation of the formation of dew and achieved Fellowship in the Royal Society by the merit of his essay upon "Single Vision." He likewise recognized the principle of natural selection, and wrote numerous articles on various subjects.

Dr. Seibels gives an interesting account of the life and writings of this early Carolinian.

Spontaneous Rupture of the Uterus, Douglas Jennings, Bennettsville. *Sou. Med. & Surg.* 93, May, 1931, p. 345.

A report of two cases, one of which recovered, and a discussion of the causes and treatment of the condition.

Fluoroscopic-Radiographic Change Switch. R. B. Taft, Charleston Radiology, 16 April 1931. The advantages of being able to make a film at any time during the fluoroscopic examination are pointed out. None of the makers of X-ray apparatus in this country makes any provision for the changes in setting the machine for this purpose. The author has designed and built a simple switch which makes all the needed changes in the machine and sets up the time switch, returning the settings to those which were previously in use during the fluoroscopy.

Diseases of Meckel's Diverticulum, J. R. Young, Anderson—*Sou. Med. & Surg.* 93, May, 1931, p. 353.

Three case reports, and a consideration of the frequency, diagnosis, and surgical pathology of these diseases, with a suggestion as to the hereditary factor in their occurrence.

**PROGRAM, TWENTY-FIFTH ANNUAL SESSION OF FOURTH DISTRICT MEDICAL ASSOCIATION HELD AT ANDERSON, SOUTH CAROLINA TUESDAY, SEPTEMBER 8th, 1931
FIRST BAPTIST CHURCH 4:30 P. M.**

Officers

Dr. W. M. Sheridan President
Spartanburg, S. C.

Dr. J. L. Bolt Vice President
Easley, S. C.

Dr. Geo. E. Thompson Secretary Treasurer
Inman, S. C.

Committee on Arrangements

Dr. B. A. Henry, Chairman Anderson
Dr. J. R. Young Anderson
Dr. J. B. Latimer Anderson
Dr. Frank R. Wrenn Anderson

Program

Invocation—Dr. W. M. Seay, Anderson, S. C.
Address of Welcome—Dr. Frank M. Lander, Pres. Anderson County Medical Society Williamston, S. C.

Response—Dr. E. A. Hines, Seneca, S. C.

Modern Treatment Uremia—Dr. R. M. Pollitzer, Greenville, S. C.

Artificial Pneumothorax—Dr. Clay Evatt, Greenville, S. C.

The Application of Surgical Drainage To Cesarean Section—Dr. Chas. A. Mobley, Pres. S. C. Medical Association, Orangeburg, S. C.

Moving Pictures Showing Boehler Fracture Work in Vienna—Dr. J. Warren White, Greenville, S. C.

President's Address—Dr. W. M. Sheridan, Spartanburg, S. C.

The Practical Value of Friedman's Hormone Test for Pregnancy—Dr. Lawrence H. McCalla, Greenville, S. C.

The Alkaline Treatment of Typhoid Fever—Dr. W. Tertsh Lander, Williamston, S. C.

Medical Aspects of Prostatic Disease—Dr. Geo. R. Wilkinson, Greenville, S. C.

Rectal Abscess—Prevention and Cure—Dr. Thomas Brockman, Greer, S. C.

Ano-Rectal Disease as a Cause of Disability—Dr. J. Dechard Guess, Greenville, S. C.

Fifty-Two Years a Country Doctor—Dr. H. B. Stewart, Fountain Inn, S. C.

Massive Atelectasis Following Tonsillectomy—Dr. J. W. Jervy, Jr., Greenville, S. C.

WOMAN'S AUXILIARY

South Carolina Medical Association

ADVISORY COUNCIL

Dr. Frank Lander, Chairman
Williamston, S. C.

Dr. P. V. Mikell, Columbia, S. C.	Dr. Curran B. Earle, Greenville, S. C.
Dr. E. A. Hines, Seneca, S. C.	Dr. F. H. McLeod, Florence, S. C.

OFFICERS

President, Mrs. L. O. Mauldin	Greenville, S. C.
President-Elect, Mrs. W. C. Abel	Columbia, S. C.
First Vice President, Mrs. W. F. Martin	Pelzer, S. C.
Second Vice President, Mrs. B. F. Sloan	Walhalla, S. C.
Recording Secretary, Mrs. Robt. Durham	Columbia, S. C.
Corresponding Sec'y., Mrs. L. H. McCalla	Greenville, S. C.
Treasurer, Mrs. J. B. Latimer	Anderson, S. C.

COMMITTEE CHAIRMAN

Publicity	
Organization, Mrs. W. C. Abel	Columbia, S. C.
Historical, Mrs. H. M. Stuckey,	Sumter, S. C.
Hygeia	
Student Loan Fund, Mrs. W. A. Boyd	Columbia, S. C.

COUNSELLORS

District 1.	
District 2. Mrs. P. V. Mikell,	Columbia, S. C.
District 3. Mrs. J. K. Wicker	Newberry, S. C.
District 4. Mrs. J. W. Bell	Walhalla, S. C.
District 5.	
District 6. Mrs. Mobley	Florence, S. C.
District 7.	
District 8. Mrs. Charles Mobley	Orangeburg S. C.

It is believed that the members of the Auxiliary really desire opportunities to aid the State Medical Society, and thus advance health measures for the people at large.

Consequently, your president is now suggesting that we do everything possible to promote the health education through Hygeia, because the House of Delegates of the American Medical Association at the convention in Philadelphia recommended that the sale of Hygeia be one of our chief activities for the year.

I am asking each Auxiliary President to appoint a chairman and cooperate in every way possible with the National Chairman, Mrs. Rogers N. Herbeot, 1509 Stratton Ave., Nashville, Tenn.

The greatest need of our Auxiliary is to have a larger organization. There should be an organized group in every county to do effective work. This cannot be left solely to our chairman of organizations—all must help.

We urge every doctor's wife to become affiliated with the state auxiliary. If you do not have access to a county Auxiliary you may become a member at large.

It was unanimously decided at the State Meeting in May to "undertake the raising of a Student Loan Fund, to be made available for the use of deserving sons and daughters of doctors who are or have been members of the South Carolina Medical Association." I am sure every doctor's

wife would deem it a privilege as well as a pleasure to help this great cause. Mrs. William A. Boyd of Columbia, S. C., has been elected chairman and is doing a splendid work trying to get things in shape to make the drive for funds. She has written many letters to Auxiliary presidents and counsellors and in October the Executive Board will meet to aid in this and other affairs of state organization. Mrs. Boyd's letter is printed below.

The Auxiliary, as its name implies, is to aid in promoting the aims and objects of Medical Society of South Carolina, especially along lines of health education and public welfare. It should not take any action contrary to, or independent of the Medical Society of South Carolina, and to that end, the President of the Society has appointed an Advisory Board of five physicians, Drs. Frank Lander of Williamston, P. V. Mikell Columbia, E. A. Hines, Seneca, Curran B. Earle, Greenville and F. H. McLeod, Florence, to whom we can go for advice and assistance. Each county Auxiliary should have Medical Society appoint three physicians on Advisory Board. Please see to this now. In order to function correctly this must be done by all.

Any way I can be of service to the Auxiliaries, please write to me about it.

Mrs. L. O. Mauldin, President.

Mrs. Boyd's Letter

Dear Auxiliary President:

According to plans adopted at the State Meeting, the Student Loan Fund Committee is to be composed of a Chairman and one member from each County Auxiliary. In appointing your representative, may I ask that you choose a woman who is not only keenly interested in the work, but one who has the leisure to do her share locally, and the willingness to attend necessary conferences elsewhere. I shall ask for no meeting that I can possibly avoid but until our plans are in working shape, there is much that we must discuss and decide together. When you have selected your representative please send me her name and address so that I may notify her directly of the first Committee meeting which will be called in October.

In the meantime, I shall be gathering information as to the management of other Student Loan Funds—the experience of others in like work

should be very helpful to our Committee. Won't you and each one of your Auxiliaries help in this "meantime," by trying to interest everyone connected with the Medical profession, wives or husbands, with whom you come in contact, at home or throughout the State, in the Student Loan Fund?

Interest in the Loan Fund will mean interest in forming Auxiliaries and certainly the first need of the work is a strong organization. Five hundred members at least should be our enrollment; an Auxiliary five hundred strong could make a great work of The Student Loan.

For our governing rules will be gladly received—and every thoughtful word for the work will be appreciated.

Faithfully yours,

(Mrs. W. A.) Mary K. Boyd.
Chairman of the Committee.

BRIEF MESSAGE TO YOU FROM OUR PRESIDENT

The President's Message:

The reports of the chairmen of the various national committees and of the state presidents indicate unmistakably to the Auxiliary women everywhere that as doctors' wives we have a definite sphere of influence as members of lay women's organizations. As such we may form a strong bond between the medical profession and the lay public.

Because of this possibility we shall make every effort this year to strengthen our organization both in numbers and in quality of work done.

The greatest demand made upon us is for the right kind of source material for health programs, and for health program speakers.

We are attempting to supply this information through a selected packet of literature, assembled by the Bureau of Public Information of the American Medical Association; by leaflets on communicable diseases compiled from the best recent medical literature and approved by a member of our advisory committee appointed for that purpose; by the dissemination of leaflets on "Some Contributions of Modern Medicine to the World"; by announcement of the American Medical Association radio broadcasts; and by using our best energies to promote the circulation of Hygeia.

We ask that every doctor's wife read the recommendations concerning Hygeia made to the Woman's Auxiliary by the House of Delegates of the American Medical Association. It is found on page 2116 of the June 20 issue of the Jour-

nal of the American Medical Association. Please see that your state and county medical societies also take notice of this recommendation of the House of Delegates.

Many Auxiliaries are doing outstanding constructive philanthropic work such as contributing to a medical benevolence fund, assisting in hospital auxiliary work and establishing medical student loan funds.

We believe that one of the best services we can render to the medical profession is to make our state and national conventions so attractive that great numbers of our women will be enticed to attend and will influence their husbands to come.

The recent meeting in Philadelphia showed that a convention can serve such a purpose. To this end we are already planning to make the convention in New Orleans the best yet if possible and we herewith invite all the doctors' wives to come and bring their husbands.

I hope your Press and Publicity Chairman will let me talk with you again. Always read her reports and those in the Bulletin of the American Medical Association. In the Bulletin are two pages edited this year, as last, by Mrs. Walter Jackson Freeman, our national President-elect. I commend those pages and these to you and ask your support to make our departments co-operative, useful and successful.

THIRD DISTRICT MEDICAL SOCIETY MEETING HELD, NEWBERRY COUNTRY CLUB, OCTOBER 8, 1931

PROGRAM

Basal Anaesthesia,

Dr. Chas. Mobley, Orangeburg, S. C.

Spinal Anaesthesia,

Dr. C. J. Scurry, Greenwood, S. C.

The Physician's Problem,

Dr. Hugh Black, Spartanburg, S. C.

The Treatment of Carcinoma of the Cervix,

Dr. Floyd Rodgers, Columbia, S. C.

Drugs, Their Use and Abuse,

Dr. G. P. Neel, Greenwood, S. C.

The Goodness and Badness of Pituitrin in Obstetrics,

Dr. T. L. Bailey, Clinton, S. C.

Officers

President ----- John K. Wicker, M.D.
Newberry, S. C.

Secretary ----- H. B. Thomas, M.D.
Whitmire, S. C.

S U R G E R Y

Wm. H. Prioleau, M.D., Charleston, S. C.

"TREATMENT OF GOITRE COMPLICATING PREGNANCY"

The management of pregnancy complicated with goitre is very much discussed at the present time. Medical treatment alone, thyroidectomy, and the ending of the pregnancy are all practiced under various conditions. As is so often the case it seems as if a middle course is the best one to follow. The subject is presented by Dr. R. D. Mussey and Dr. William A. Plummer of Rochester, Minnesota in the Journal of the American Medical Association, August 29, 1931.

The state of pregnancy demands increased secretion of the thyroid gland, thus predisposing to thyroid disturbances. It is well known that pregnancy will often precipitate a hyperthyroidism where apparently none has been present before. It will also increase the activity of a hyperthyroidism already existing. After the pregnancy is over there is a tendency for a complete or partial remission. With each subsequent pregnancy as a rule the activity of the disease is greater and the degree of the remission is less.

Should the goitre be giving little or no trouble it is better to do nothing about it other than practice the usual precautionary measures, especially rest, and may be small doses of iodine. Should the overactivity be of moderate degree it is best to attempt to control it by medical treatment, consisting essentially of rest, sedatives and iodine. In cases not controlled in a few weeks thyroidectomy should be done. The severer cases and those with marked pressure symptoms are best subjected to thyroidectomy at the start.

The state of pregnancy is not a contra-indication of thyroidectomy. There should be no hesitancy in resorting to it should the symptoms and signs indicate the need. The course of pregnancy is rarely interrupted and the patient generally goes through the remainder of it better than she would have otherwise.

In cases with only a partial remission following a pregnancy and in those with a nodular goitre which will probably again become overactive, it is advisable to perform a thyroidectomy after the pregnancy, especially if a subsequent one is likely.

PROGRAM OF THE SEVENTH DISTRICT MEDICAL ASSOCIATION, SUMTER, S. C., THURSDAY, SEPT. 24, 1931

Invocation by Dr. George T. Harmon, Trinity Methodist church, Sumter, S. C.

Address—By Dr. J. R. Young, Anderson, S. C., President-Elect South Carolina Medical Association.

Address—By Dr. E. A. Hines Secretary S. C. Medical Association, Seneca, S. C.

"Measles Prophylaxis or Modification by Parents Blood Serum,"—By Dr. Wm. Willis Anderson, Atlanta, Ga.

"Case Report of An Operation For Fracture and Dislocation of Thoracic Vertebra—By Dr. Carl B. Epps, Sumter, S. C.

"Some Phases of Thoracic Surgery"—By Dr. Deryl Hart, Duke University, Durham, N. C.

"Infections In and About the Hip Joint"—By Dr. Shands, Duke University, Durham, N. C.

"Cervical Infection, a Cause of Cancer and Other Pelvic Pathology."—By Dr. Ivan Proctor, Raleigh, N. C.

Case Reports.

Dinner at Claremont Hotel at 2 P. M.

Officers

Dr. A. H. Brown	President
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Dr. W. H. Carrigan	Vice President
Summerton, S. C.	
Dr. J. H. Porter	Vice President
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Dr. C. D. Jacobs	Vice President
Kingstree, S. C.	
Dr. Carl B. Epps	Secretary-Treasurer
Sumter, S. C.	

NEWS ITEMS

Dr. William Egleston the recently elected chairman of the State Board of Health after several weeks in the hospital is recovering his health.

Dr. B. O. Whitten Supt. of the S. C. Training School at Clinton, S. C. was granted a leave of absence July 1st for a period of six months to assist in establishing a State Training School in Utah.

Dr. Whitten writes that a sterilization law was enacted at the same time the school was provided for.

Dr. W. Atmar Smith of Charleston was recently elected president of the association of Southern Sanatoriums at the Atlanta meeting.

Dr. Sam Harmon, of Columbia, chairman of the council attended the 3rd District meeting in Newberry October 8th and participated in the discussion of several papers.

Dr. Edgar A. Hines, Secretary-Editor of the South Carolina Medical Association, will attend the annual meeting of Secretaries and Editors of State Journals at the Headquarters building of the American Medical Association, November 13, 14, 1931.

Dr. Seale Harris of Birmingham, Alabama formerly Secretary of the Southern Medical Association visited the headquarters of the South Carolina Medical Association at Seneca recently.

The Southern Medical Association will meet in New Orleans, November 18 to 20. Since the Association met there seven years ago many changes have taken place. The new municipal auditorium, the most modern in the South and one of the most modern in the whole country, makes it possible for all activities to be under one roof: not only the general sessions and the sections, but the scientific and technical exhibits, and the main social function. The hotel facilities have been doubled, so that all are assured of comfortable accommodations accessible to all the activities of the meeting. New Orleans has also improved its hospital facilities and broadened the scope and effectiveness of its public health work.

Conforming to the action of the Association, the New Orleans meeting will occupy three days. The first day there will be a general clinical program, a program arranged by the President of the Association, and several other meetings. On Thursday and Friday, sections will meet in half day sessions, and on Friday, running concurrently with the sections, a general program by New Orleans physicians arranged by a local Clinic Committee will be given. What has formerly been presented in four days will now be presented

in three, and all under one roof, enabling physicians to go easily and quickly from one program activity to another.

The entertainment features will include the President's reception and dance on Wednesday evening. Thursday evening has been given over to alumni reunions. Golf tournaments for both the physicians and the ladies and a trap shooting tournament with the introduction of a new feature, skeet shooting. There will be special entertainment for the visiting ladies, this being under the direction of the Women's Auxiliary to the Orleans Parish Medical Society.

FOODS AND FOOD ADVERTISING

Today advertising of foods, separate from the package container, is not controlled by any food statutes, and indeed is quite free of any efficient control. The writer of advertising for food products, aside from such limited knowledge of foods and nutrition as he may possess, has only a versatile vocabulary and his conscience as guides in dramatizing the virtues of the products he proclaims to the public. The god of Advertisia is not accuracy but sales reaction. Under these conditions, advertising for food products began to approach the tales of Hans Christian Andersen and the brothers Grimm as examples of what could be accomplished in legend and fantasy. Into this mass of mingled truth and deception entered the Committee on Foods of the American Medical Association. It is not surprising that its initial steps should have been greeted with apprehension and bitter deprecation by some of the organs of the food industry, of business and of advertising. If the food industry and food exploitation are actually so pure that they do not need reformation, why anticipate any hazard from a scientific investigation? The discussions of the work of the committee have not, however, acclaimed the wholly righteous character of the industry. They have answered the announcement of the creation of the Food Committee only with the argument that the food industry is already too much controlled. Printers' Ink, that staunch defender of advertising—right or wrong—replies only by saying that it is the first duty of the American Medical Association to rid the public of incompetent physicians. What Printers' Ink wants apparently is a list of blue ribbon doctors. Its editor obviously does not realize that through the creation of membership in the American Medical Association the organization has such a list and that

this list is publicly available through the American Medical Directory.

The reason for the entrance of the American Medical Association into the food field is the development of scientific knowledge during the last twenty years that has changed the entire attitude of both the public and the profession toward the food question. The necessity for understanding the importance of minerals in relationship to human health, the necessity of the vitamins for the prevention of deficiency diseases and for the insurance of adequate growth and resistance to disease, the development of new knowledge regarding various types of proteins, carbohydrates and fats have made foods something beyond mere builders of energy for the human body. The organs of the advertising and food industries must realize that foods today occupy an equal place with drugs, biologic products and surgery in the control of human ailments.

Notwithstanding these facts, however, the medical profession need not have concerned itself with the propaganda made for food products had not the advertising industry forced the medical profession into the situation. It was not the medical profession that originated the phrases "health food," "physicians recommend," "body builder" and "food tonic." These slogans developed in the minds of advertising copy writers. In 1925, before the Committee on Foods was established, advertising of foods approximated closely the amount of space devoted to the advertising of drugs and exceeded the space devoted to biologic preparations in The Journal of the American Medical Association. Since 1905 the Council on Pharmacy and Chemistry has advised concerning the advertising of drug products. When it was realized that special knowledge was demanded to pass on the claims made for foods in the advertising pages, it became necessary to appoint a special committee for this purpose. The Committee on Foods was established to protect the readers of The Journal against improper claims made for foods. If the medical profession required such protection, how much more was the protection necessary for the average layman to whom the same claims were made as were made to physicians.

Only those who have been actively associated with the Committee on Foods since its inception can realize the vast amount of good already accomplished. Some of the fundamental principles by the committee that deserve recognition: 1. The appearance on the label of any food product of a descriptive statement showing exactly what the product is. The food industry is flooded with the use fanciful titles for products which do not indicate in any their actual ingredients. How is the person who happens to be allergic or sensitive to wheat, barley, eggs or some certain food product

to know whether or not the food he eats includes any of these substances? 2. Since vitamins are of the greatest importance for the maintenance of health and for adequate growth, knowledge of vitamin content relative to the known content of substances rich in vitamins is important. When vitamin claims are made, advertising must state the vitamin content in relationship to these known substances. Since there are several processes for enhancing vitamin D potency in various food products, purchasers are entitled to know not only the process by which the vitamin content is enhanced but also the extent of this enrichment. 3. Even bread, the staff of life, has been subjected to such sophistication in various places as to make it necessary for the purchaser to know whether or not the bread he buys is what it is claimed to be.

The Committee on Foods up to June had studied some 500 products, of which only 128 had been accepted. By September it had studied 511 products, of which 165 had been accepted. The primary reason for this rapid progress has been the willingness of manufacturers who had submitted products to the committee to change labels and to correct advertising claims in order to make them acceptable. This willingness has been displayed not only by executives of some of the great food corporation but also by executives of smaller firms producing a single product. Such cooperation is encouraging. It signifies great good for the American people. It signifies particularly that the apprehensions of advertising agencies and of publications in the advertising field as to the work of the committee are wholly unwarranted.—*Jour. A.M.A.*, Oct. 3, 1931.

RAW MILK VERSUS PASTEURIZED MILK

The beneficial influence on the public health which has accrued from the widespread practice of pasteurization of milk and dairy products has left little doubt in the minds of most public health workers as to the necessity for the more or less universal adoption of this simple preventive measure. Furthermore, the enormous increase in the production and consumption of milk and milk products has introduced new problems relating to its safety and wholesomeness. The responsibility of public health officials, milk distributors and dairymen in securing a clean and safe milk supply is indicated by the constantly recurring milk borne epidemics in this country. During the six-year period from 1924 to 1929, 258 milk-borne epidemics were officially reported by state health officers. These epidemics involved 10,906 persons and resulted in the death of 371.

To the embarrassment of those public health officers who have succeeded, often after a bitter

struggle, in securing the passage of laws requiring the pasteurization of milk and dairy products, reports of alleged superiority of raw milk over pasteurized milk appear from time to time. A recent example is an article by Scott and Erf of Ohio State University, who conclude that milk subject to heat loses its hematogenic and growth-promoting properties; that rats fed on commercial pasteurized milk fortified by cod liver oil and tomato juice failed to equal in growth and development rats fed on the milk of cows given a diet high in mineral vitamins; that the pasteurized milk from cows fed on a special diet rich in minerals does not produce the anemia usually reported as occurring in the albino rat following an exclusive milk diet. The influence of the diet of cows on the quantity and quality of the milk has been a matter of common knowledge for many years. The animal chosen for these experiments, the white rat, is one that is known to develop anemia when fed an exclusive milk diet. It is, however, hazardous to conclude that the same thing which happens to rats will happen to human beings, particularly infants, who are fed an exclusive milk diet. There is no convincing evidence at hand to indicate that the feeding of raw milk, pasteurized milk, or raw or pasteurized milk which has been boiled, has any appreciable influence on the blood picture of infants, children or adults on a milk diet. Many writers on infant nutrition recommend boiling cow's milk in order to destroy disease-producing organisms and for its favorable influence on the curd.

There is evidence that the antiscorbutic vitamin is largely destroyed by pasteurization or boiling. When one realizes that the amount of vitamin C in raw milk is insufficient to protect against scurvy and must be supplied by vitamin-containing adjuvants, this factor assumes little importance.

In the report of the Committee on Milk of the Conference of State and Provincial Health Authorities of North America, attention is particularly directed to the Scott-Erf report. The committee emphasizes the fact that, in all but one of the four experiments conducted by these authors, the raw and the pasteurized milk used for experimental purposes were not from the same sources and therefore were not comparable. The raw milk was obtained from cows to whose regular feed had been added a "special complex mineral mixture," while the pasteurized milk was procured from a corner grocery store. Apparently no attempt was made to determine the diet of the cows supplying the commercial pasteurized milk.

The committee's critical analysis of the Scott-Erf report led to these conclusions:

It would, therefore, be unscientific to draw any conclusions from these experiments with refer-

ence to the effect of pasteurization on the nutritive value of milk. In order to draw valid conclusions it is necessary to use the same milk for both series of animals, making sure that the only difference between them is the factor of pasteurization. This was done in only one of the four experiments and the number of animals to which the pasteurized milk was fed in this case was only eight, whereas the number of animals to which the corresponding raw milk was fed was fifty-two. Such a sweeping conclusion as is contained in the title of this paper should not be drawn from experimental results on only eight animals. In fact, the paper does not contain satisfactory evidence that the relatively slight difference between the average weights of the raw and pasteurized groups may not have been within the range of probably experimental error.

In view of the fact that reprints of the Scott-Erf report have been widely distributed by raw milk dealers in an effort to discredit pasteurized milk in the mind of the consumer, the necessity for close scrutiny of the evidence adduced by antagonists of pasteurization is apparent.—*Jour. A.M.A.*, Oct. 3, 1931.

MALIGNANT LYMPHOMA AND URINARY TRACT

Under the term malignant lymphoma or lymphoblastoma, Richard Chute, Boston (*Journal A. M. A.*, Oct. 3, 1931), includes Hodgkin's disease or lymphogranuloma, lympho-epithelioma, lymphosarcoma and lymphatic leukemia, all of which have the common characteristics of being fatal and of forming lymphatic cell tumors or infiltration throughout the body. A further characteristic is that, by means of the pressure or invasion of these widespread tumors, lymphoma may produce signs or symptoms referable to any organ or system in the body, including occasionally the urinary tract, which may mislead one to miss the fundamental diagnosis of lymphoma. The relation of lymphoma to the urinary tract in this regard is considered, including the pathologic condition found and the symptomatology exhibited. Points in the diagnosis are taken up, and, finally, a few cases with autopsies are given as examples.

PUBLICATIONS OF INTEREST TO OTOLARYNGOLOGIST FROM 1925 TO 1931

According to Thomas E. Carmody, Denver (*Journal A. M. A.*, Oct. 3, 1931), the literature of otolaryngology, while increasing slightly in volume since 1925, has shown some variations and increased interest in a few subjects. An achievement, of which otolaryngologists may feel justly

proud, is the initiation of publication of the Archives of Otolaryngology, which, while not promoting or encouraging an increase in the number of papers, has, through an able editorial board, stimulated and encouraged improvement in quality. The most remarkable feature of the literature of otolaryngology is that relating to new diseases, or entirely new angles on treatment of already known pathologic conditions. A few of the many good papers that have been published in the last few years are mentioned by the author who hopes that the brief outline of the literature during that time will stimulate all otolaryngologists to increased effort.

ANEMIAS OF INFANCY AND EARLY CHILDHOOD

Leonard G. Parsons, Birmingham, England (Journal A. M. A., Oct. 3, 1931), believes that a classification of the anemias of infancy solely according to the blood picture is, if not impossible, valueless, for a similar blood picture may be given by cases which have quite different pathogeneses. Indeed, even during the course of the illness the blood picture may change; thus a case at one time may show marrow activity and produce the blood picture described by von Jaksch and later on show the characteristics of the chlorotic anemia of French writers. For the same reason, at any rate in the present state of knowledge, it is inadvisable to divide anemias into primary and secondary groups but rather to regard all infantile anemia as secondary either to some disturbance in the child's health or to some defect in its diet. In other words, the anemia is a response on the part of the blood to some form of injury, and it is possible, as suggested by Cooley, that the type of response may vary in different races and that herein lies the reason for instance of the limitation of sickle cell anemia to the Negro race. For the purposes of classification the pseudoleukemia of von Jaksch is regarded as a syndrome which may arise from many different causes. On the other hand, the true leukemias are not included, since they are relatively unimportant in the anemias of infancy, being probably neoplastic diseases and not a response of the blood to noxious stimuli. Bearing these points in mind, the author classifies the anemias of infancy thus: (1) those due to a defect of nutrition (simple or dietetic anemias, and endogenous or constitutional anemias); (2) those due to infection; (3) those due to abnormal hemolysis, and (4) those due to a combination of one or more of the preceding causes.

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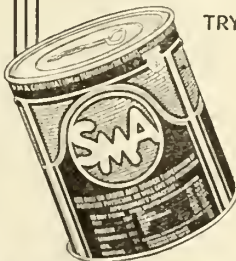
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The Journal

of the

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The Iron Content of Mead's Cereal is Higher than that of Common Foodstuffs

Iron Content of Foods, Milligrams per Hundred Grams*

MEAD'S CEREAL	24.0
Kidney	19.0
Spleen	13.8
Romain	11.9
Liver	8.8
Egg yolk	8.6
Molasses	7.3
Beans, dried	7.0
Peas, dried	5.7
Brain	5.3
Wheat, whole	5.0
Heart, beef	4.4
Hazelnuts	4.1
Almonds	3.9
Oatmeal	3.8

Spinach	3.6
Eggs	3.0
Beef, lean	3.0
Prunes, dried	3.0
Bread, brown	3.0
Dates	3.0
Figs	3.0
Olives	3.0
Pecans	2.6
Endive	2.6
Chard	2.5
Corn meal	2.5
Turnips	2.3
Veal	2.3
Raisins	2.1

*From *Clinical Nutrition and Feeding in Infancy and Childhood* by I. N. Kugelmass, M. D., Philadelphia: J. B. Lippincott Co., 1930. Reprinted by kind permission of the author and publisher.

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The Journal

OF THE

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EDITORIAL

DOCTORS CARRY ON DESPITE THE DEPRESSION

When the financial crisis spread its devastating gloom over the country in the fall of 1929 we wrote an editorial urging the profession to stand firm in its organized capacity and in its scientific interests especially. There is every reason to believe that both of these objectives have been adhered to and that doctors as a class will emerge from the crisis with much to their credit on account of the way they have met the emergency. An editorial in the November issue of the Rhode Island Medical Journal expresses pretty well our thoughts about the subject at this juncture.

THE DOCTOR AND HARD TIMES

The present financial depression throughout the world has its effect on all sorts and conditions of men and, among others, on the doctors. If we leave out of consideration the losses to individual physicians dependent on the depreciation in value of securities which they happen to have possessed at the time of the crash, we still have the general effect on the work and

prosperity of the profession to consider. This is dependent directly on the financial situation of the world in general. In one matter, however, the doctors are more fortunate than people in other walks of life—they are not out of work. However impoverished the people may become, they still persist in being ill and have to be cared for by somebody. Thus the free clinics are overcrowded and the practising physician, who, by the way, may be overworking in some of these clinics, finds that, though his private work keeps up, his income dwindles because people do not pay their bills. Surgical practice becomes more and more restricted to operations of necessity only, and private hospitals and sanitariums are finding it hard to keep their beds filled. Funds for the support of medical research are very hard to obtain and a definite retardation in the advance of medical knowledge must result. The picture is an unpleasant one and blends well with the evidence of depressing economic conditions seen everywhere. Nevertheless we of the medical profession are in many ways more fortunate than are others. At least we have our jobs,

with as much to do as ever. In spite of the necessity to get along on reduced income we can go ahead cheerfully. The conscientious doctor regards his income merely as a by-product of his work and he will carry on, consistently reducing his fees wherever the unfortunate condition of his patients demands such action, doing his best to conserve the health of his community and withal on his own part to "make both ends meet."

DEATH OF DR. DAVIS FURMAN

The passing of ex-president Davis Furman of Greenville removes one of the outstanding members of the South Carolina Medical Association, faithful to the highest ideals of his profession to the day of his death.

Dr. Furman was accorded many distinguished honors by various medical societies. He

was the first president to be elected by the House of Delegates at its organization meeting in 1905. He served the state medical association and organized medicine in general with marked enthusiasm, and consistent loyalty. It was an inspiration to the younger members of the profession to note the presence of Dr. Furman wherever there was a get together of medical men in his vicinity although he was well beyond three score years and ten. Dr. Furman was a profound student of medicine contributing important articles to the literature throughout his long career. His contributions to public health and his official connections with many health organizations were notable. He was a valued member of the State Board of Health of South Carolina at the time of his death. He will be sorely missed by a multitude of doctors and other friends.

COLUMBIA MEDICAL SOCIETY

Second regular meeting of the month called to order by Dr. J. H. McIntosh in the chair in the absence of the President and Vice President at 8:35 P. M., September 28, 1931.

Dr. Weston, Jr., reported for committee on employing a stenographer to take the discussion of the paper at its meetings.

Motion by Dr. Harmon that we defer action until next business meeting, seconded, discussed and passed.

Motion by Dr. Harmon that the same committee which ordered the new chairs be appointed to try to improve the said chairs. Seconded, discussed and passed. Committee consists of Dr. Harmon, chairman and Dr. Allison.

Motion that question of making radio talks by members of the society be referred to board of censors. Seconded and passed.

Dr. Hugh Wyman motion to reconsider the radio motion failed to pass.

Dr. Hugh Wyman announced that Dr. Frontz

of Baltimore would be the guest speaker also he would be the guest of the S. C. Urological Association which meets the next day i. e. Oct. 13, 1931. Members of the society are asked to their meetings and to participate in the same.

Dr. Bullock presented the C. P. C. with a complete history and physical examination. The man was about 40 years of age who had a marked depression. Suddenly he developed an acute abdominal pain causing flexion of legs, having a board like rigidity of upper abdomen. No fever, 7,000 W. B. C., pulse rate 65. Slight fall in blood pressure. Diagnosis of acute pancreatitis was made. Discussed by Drs. Heyward, Harmon, Taylor, Hugh Wyman and Weston, Jr. Specimen of cystic right kidney shown by Dr. Bullock. Dr. Plowden closed the subject by giving a brief outline of pathological cystic kidneys.

There were 26 members of the society present.

Society adjourned at 9:40 P. M.

Respectfully submitted,

William Weston, Jr., Secretary.

ORIGINAL ARTICLES

*"HYPERTHYROIDISM FOLLOWING THYROIDECTOMY"

By William H. Prioleau, M.D.

It is a rather sad commentary upon thyroid surgery that the condition of hyperthyroidism following thyroidectomy should be considered of sufficient importance to discuss before the State Association. In cases of hyperthyroidism, thyroidectomy should be a most satisfactory and almost certain means of relief, and so it is if properly performed. However only too often is operation not followed by a cure. It is this condition which we must explain.

Our discussion will include those cases which have symptoms of hyperthyroidism several months following a thyroidectomy which was done for Grave's disease or toxic adenoma. The diagnosis of the condition is apparent. There are present the usual symptoms: palpitation, tachycardia, nervousness, and ease of fatigue. The basal metabolic rate is generally above normal. Almost invariably there is a palpable mass of thyroid tissue.

In most of these cases there has been a persistence of the symptoms since the operation. In a few cases there has been a period of complete relief or even of hypothyroidism only to be followed by a recurrence of the symptoms some months later. For the sake of completeness we must mention those unfortunate cases subjected to thyroidectomy upon the basis of a wrong diagnosis. Chief among these are cases of vaso-motor instability, cardio-renal disease, and the functional neuroses. Such cases are often made worse by thyroidectomy.

In those cases in which hyperthyroidism is present after thyroidectomy the cause of the disease is one of chronicity with considerable variation in the intensity of the symptoms. In a few of these cases the disease subsides spontaneously, however in a number it becomes much more active.

As to the etiological factors—true recurrences are comparatively rare. Their occurrence is seldom over one per cent. In these cases we feel that foci of infection and undue mental or physical strain play an important part. Nevertheless in an occasional case none of these factors is present. Our chief consideration is that of persistence of the disease after operation a condition which should seldom if ever exist. However only too often is it present in 10-20 per cent of a series of cases. It is invariably due to an incomplete operation. Most commonly too much thyroid tissue is left at the upper pole: sometimes the operation is limited to one lateral lobe, and the other one gives trouble; at times an intrathoracic lobe is overlooked. If the symptoms of hyperthyroidism are present it can be positively concluded that there is an excess of thyroid tissue.

As regards treatment—the same rule holds as in the primary disease—re-operation is the only satisfactory and almost certain means of obtaining relief. Other methods are generally a waste of time. Roentgen ray is sometimes of value, Lugol's solution holds some mild cases in check, but it sometimes increases the severity. In all cases tonsils and infected teeth should be removed. Other foci of infection should be treated. The usual general hygienic measures should be used.

The prevention of the condition is based upon a complete primary operation. As a rule all thyroid tissue possible should be removed with due regard for the protection of the parathyroid bodies and the laryngeal nerves. Careful protection of these structures precludes the likelihood of removing too much thyroid tissue. A period of postoperative hypothyroidism is of good prognosis. Routinely all foci of infection should be attended to. Limitation of activities should be enforced for sufficient time after operation. If the above principles are adhered to, the incidence of hyperthyroidism following thyroidectomy will be less than one per cent.

*Read before the South Carolina Medical Association, Greenville, S. C., May 6, 1931.

DISCUSSION

Dr. O. B. Mayer, Columbia:

The etiology of hyperthyroidism is not known, but it is recognized that extirpation of a large part of the thyroid gland relieves the symptoms in most cases. A nicety of judgment is necessary to know how much of the gland to remove. If too much is removed a hypothyroidism develops, and there is danger of injuring the contiguous structures, the parathyroids or recurrent laryngeal nerves. Fortunately, a hypothyroidism is easily controlled by administering thyroid extract. On the other hand, if too little is removed there is a continuation of the symptoms. The patient is not cured. The strain on the heart muscle and nervous system continues, and the operation is looked upon with disrepute. Therefore it behooves the surgeon to remove the optimum amount. Even the diseased thyroid gland has some power in regulating its function. It is not always easy to determine whether the symptoms of post-operative hyperthyroidism are due to continuation or recurrence of the disease.

In general, the post-operative treatment is the same, and the patient has to subject himself to the hazard of a second operation. Regardless of how well the operation may be done, there are bound to be a few recurrences.

I want to congratulate Dr. Prioleau for bringing this important phase of the disease before us.

Dr. Stewart R. Roberts, Atlanta, Ga.:

This is a real question. Dr. Hugh Smith just remarked to me then that the answer has probably not yet been written. It seems to me we should realize two facts regarding hyperthyroidism; first, that about five per cent of the cases are exceedingly difficult and subject to complications either before, during, or after thyroidectomy; and, second, that we probably have a great deal more hyperthyroidism in the southeast than we probably realize. Now, there are cases that do recur, as the essayist just said. They may recur because too little has been removed, too little tissue is removed at the operation; they may recur because they just recur, and we can not explain it; and they may apparently recur and the symptoms be due to something else. It is those that apparently recur and do not actually recur that I want to say a word about.

We have just had a very elegant woman who has had hyperthyroidism. A splendid surgeon did a splendid operation, but she was invalided for two years after the operation with tachycardia, nervous sweating, and anxiety. Did she have hyperthyroidism, or not? If so, was it a recurrence? Her basal metabolic reading was slightly above a plus ten, but there were none of the symptoms. She came of an unstable family. She was by heredity fertilized for neuroses, and she said her whole trouble dated back to her surgeon,

who said to her: "If you are not operated on you are going to have heart disease." She came out of her thyroidectomy with a fixed idea of heart failure. There was no failure, but there was a fixed neurosis with heart symptoms. She had to be taught to be healthy; the fixed idea of cardiac failure had to be pulled out of her mind.

Another patient had two operations for hyperthyroidism. Her physician sent her to us, and for the life of me I could not work it out. We sent her to Dr. Cile, and he said: "This is not hyperthyroidism; this is effort syndrome, disordered action of the heart. This woman I think should have a resection of the nerves to her adrenal glands." (That biological surgery that he is doing is beyond my ken).

Those are the groups that are coming to us. If they come, is it a recurrence, or is it a disordered action of the heart, a fatigue syndrome, is it a psychic trauma, or what is it? It takes brains to work it out, and sometimes even at that we are uncertain.

Dr. T. B. Reeves, Greenville:

As to the question of recurrences following operation for exophthalmic goiter, I do not think they are always due to the fact that too much thyroid is left in. We have the same thing happen in cases of duodenal ulcer. Why, in some cases of duodenal ulcer, do we get gastrojejunal ulcer following gastro-enterostomy? We do not know how to explain it. Probably it is not due to the method or the manner in which the operation is performed but is undoubtedly due to the type of individual. There is something about the individual's nervous system which possibly accounts for the development of recurrent ulcers. The same thing, I think, is true in thyroid surgery. In some patients we do a thyroidectomy, leaving a small amount of gland, and in others we leave the same amount of gland tissue at operation, possibly more, and we do not always get the best results in the first group. I think it is best for the average surgeon to leave a fair amount of thyroid tissue on both sides, being particularly careful not to injure the recurrent laryngeal nerves.

Dr. Prioleau, closing the discussion:

I appreciate very much the discussion of my paper. The cases Dr. Roberts mentioned sound as if they belong to the group designated "effort syndrome" or "fatigue neurosis." They are not cases of hyperthyroidism, and we would not expect them to be benefitted by thyroidectomy. Occasionally we operate upon one of these cases, due to a mistaken diagnosis; and we regret it for years after.

Dr. Reeves brings up the point that the same condition which caused the hyperthyroidism primarily may cause a recurrence after a subtotal

thyroidectomy. This fact we recognize; we believe it, however, to be of more theoretical than practical importance. In operating upon so-called recurrences we generally find a nodule of gland covered with an intact capsule. This is quite conclusive evidence that the primary operation was incomplete.

*RE-INJECTION OF CEREBRO-SPINAL
FLUID AS AN AID IN THE TREAT-
MENT OF CEREBRO-SPINAL
MENINGITIS EPIDEMICA

REPORTS OF CASES

Lee W. Milford, M.D., Clemson College, S. C.

For many years, Cerebro-Spinal Meningitis has been a disease of great concern to the men of the medical profession and has exacted a very high mortality. In the treatment of this disease, auto-therapy has great possibilities and this field is so undeveloped that eventually it may furnish a solution to many questions which puzzle the medical mind today. Auto-genous serums, bacterines and vaccines have undoubtedly been of great aid in the treatment of those diseases in which they have been used.

According to the literature, cerebro-spinal fluid was first used autogenously by Dr. Edward S. Lauzer, of Wyoming, by re-injection of the spinal fluid into the gluteal muscles, using the white blood cell count as a guide, and removing an average of 10 c. c. of spinal fluid which was re-injected into the gluteal or pectoral muscles of the patient.

Our treatment did not consist alone of the re-injection of cerebro-spinal fluid, but was used in conjunction with the anti-meningococcus serum for the treatment of this particular type of meningitis. The spinal fluid was re-injected into the spinal canal at the site of the pathological tissue instead of into the gluteal and pectoral muscles. We were glad to hear recently a famed author who stated that immunologists have begun to believe that the best results from the re-injection of a serum would probably be obtained by injecting the serum at the site of the pathological tissue or as near thereto as possible.

METHOD USED

The spinal fluid was withdrawn from the patient in the usual manner, and the amount to be re-injected was governed by the amount withdrawn. We re-injected approximately 2 c. c. of fluid for every 10 c. c. withdrawn, the total amount re-injected ranging from 2 c. c. to 8 c. c. at a treatment.

This procedure was followed in all four of the cases cited because we did not believe any harmful effects could result from returning some of the spinal fluid which had been removed under the usual aseptic conditions and replacing no more bacteria than had been withdrawn. It must be remembered that each individual is a complex electro-chemical mechanism and that it is impossible to manufacture any serum which will produce identical results in all cases. It appears that bacteria of a selective nature, when injected into the same tissue as that of their own selection within the same body, have a tendency to produce opposite action.

It is reasonable, therefore, to conclude that every living organic body carries within itself a defensive mechanism developed by heredity which, in case of bacterial disease, if properly activated, will destroy the invading bacteria. Also, it appears that activation can be best accomplished by re-injection of the infected body fluid into tissue of the same body and preferably at the site of infection.

It is not my intention to discourage in the least the use of anti-meningococcus serum, but since it is so difficult to obtain serum of the exact seriological type needed, I feel that the re-injection of spinal fluid may be of benefit.

Dr. Lauzer has demonstrated that some cases will recover if treated by auto-therapy alone, but as he stated, "a great deal more data and a much larger number of cases must be secured and treated in order to determine the value of auto-therapy unassisted by anti-meningococcus serum. There must also be further standardization of the amount of fluid to be re-injected and additional study regarding the frequency of spinal punctures and the relative value of the leukocyte count."

A great many writers have discussed the value of intra-spinal punctures and the importance of keeping the spinal pressure down to

*Read before Anderson County Medical Society, Anderson, S. C., July 13th, 1931.

15 m. m. I think this is most essential. The cerebro-spinal pressure must be relieved early if the patient is to survive, and the amount of spinal fluid withdrawn should depend upon the amount of pressure present and will vary at each spinal puncture. The amount of fluid present and the progress of the disease should determine the amount of serum to be withdrawn. This amount varies from 8 c. c. to 42 c. c. at a treatment in the cases cited. I did not use a pressure instrument to determine the pressure left, but usually withdrew fluid until there would be only one drop every three seconds, or until we were satisfied that the pressure had been sufficiently relieved.

TECHNIQUE USED

The usual spinal puncture needle was used except at times when episthotomous indicated the use of a smaller needle. Needless to say, aseptic conditions are very essential in making spinal punctures. The patient was usually placed on the right side with the head elevated above the level of the spinal canal to facilitate gravitation of the cerebro-spinal fluid. Both knees were flexed, with the left flexed to the more acute angle, thus removing pressure on the right thigh, and bringing about a posterior curvature of the spine in the dorsal lumbar region. A hypodermic syringe, with a small needle, containing a 1 per cent solution of novocain is used to infiltrate a small area of the skin between the spinal processes of the vertebrae selected for the treatment. This is of much assistance, particularly in those cases which are highly nervous and have a hyper-sensitive skin. The spinal needle is inserted and is connected by a rubber tube to a syringe. A sufficient amount of fluid is retained in the syringe for the purpose of re-injection in the quantity previously mentioned. This syringe is then removed, placed on a sterile towel, and covered with a sterile cloth. Removal of the spinal fluid is continued until a sufficient amount has been withdrawn to relieve the cerebro-spinal pressure. The syringe is then re-connected to the needle and a proper amount of the cerebro-spinal fluid re-injected.

At the beginning of the re-injection, the pillow is removed from under the patient's head which is allowed to hang somewhat lower than the level of the spine.

When the re-injection of the spinal fluid has been completed, a rubber tube is used to connect the spinal needle with the receptacle containing the anti-meningococcus serum. The serum is kept at body temperature and allowed to flow in by gravitation. Near the end of the treatment, this receptacle is held approximately on a level with the spinal canal, and the pressure is best duplicated by raising and lowering this receptacle. It is very important for the patient's comfort not to give enough of the serum to raise intra-cranial pressure. The foot of the bed is raised 18 inches for two hours following the treatment.

Frequently the patient will sleep throughout the treatment, falling asleep immediately after the initial pressure has been relieved. There is no indication for opiates until the return of the headache, which symptom shows that the pressure is rising.

The punctures should be frequent in the beginning of the disease, and may vary according to the condition after a diagnosis is made. In my opinion, it is better not to wait longer than eight to ten hours between each of the first three treatments. If any permanent improvement is to be expected (it will likely begin following the fourth treatment. However, there may be a definite improvement following the initial treatment, but there will be a tendency to a relapse which will be shown later. Glucose and saline are of great value in aiding the comfort and condition of the patient. This is the best method of controlling vomiting after the pressure has been relieved, and is also useful in helping to produce sleep and in supplementing the body fluids. Generally 1-6 of a grain of morphia is sufficient to produce rest; switching to sodium amytal as early as possible is desirable.

CASE REPORT

Case No. 1—W. S.

Admitted to hospital on stretcher 12:45 a. m., February 3, 1931.

Complaint: Awakened about an hour ago having chill; general malaise; slightly nauseated.

History: Freshman, age 18, room 416, barrack No. 2, weight 113 lbs, height 67 1-2 inches. Had a slight cold but has felt good until onset of present trouble. Has never had any serious illness, injury, or operation. Mother died of T. B., Father, brothers and sisters all living and well.

Physical Examination: Slender, well-nourish-

ed, dark complexion, intelligent looking individual. Throat slightly red. Heart and lungs normal. Kernig and Brudzinskiss signs negative. Temp. 102 2-5, pulse 120, resp. 26.

Progress Notes: 7 a. m. patient vomited, complained of pain in epigastrium and right testicle. Right testicle tender to touch but no swelling. Blood count, leukocytes 23,200, polys, 92 per cent, hemoglobin 75. Urinalysis negative. 2:30 p. m. leukocyte count 27,000, polys. 96 per cent.

Seen in consultation with two other doctors. Surgeon said he could not find anything indicative of abdominal involvement. Continued to complain of pain in epigastrium and right testicle. Temp. at 8 p. m. 103, pulse 126. 8:30 p. m. patient complained of severe headache, vomited, projectile type with considerable straining and collapsed. Nurse called and said patient was dying. Pulse was not perceptible, Caffein Sodium Benzeate grs. 15 and Digifoline grs. 3 were followed by 15 c. c. 50 per cent glucose after patient was revived. He was turned on right side and 10 c. c. spinal fluid was withdrawn, which showed a faint cloudiness. Anti-meningococcus serum was secured and at 12 m. 10 c. c. more spinal fluid withdrawn, re-injected 2 c. c. spinal fluid followed by 8 c. c. anti-meningococcus serum.

2nd day: Temp. 104 1-5, pulse 120. Leukocyte count 23,000, polys. 92 per cent. Spinal fluid withdrawn 20 c. c., 4 c. c. spinal fluid re-injected followed by 8 c. c. anti-meningococcus serum. 10 p. m. 20 c. c. of 50 per cent glucose given intravenously. Temp. 99 3-5, pulse 74, patient rational.

3rd day: 8 a. m. temp. 99, pulse 78. 15 c. c. anti-meningococcus serum given intravenously.

4th day: Temp. 99 4-5, pulse 68. Spinal fluid withdrawn 10 c. c., 2 c. c. spinal fluid re-injected, and 10 c. c. of anti-meningococcus serum given. 20 c. c. 50 per cent glucose administered intravenously.

5th day: Leukocyte count 9,400, polys. 77 per cent. Temp. 101, pulse 78. Spinal fluid withdrawn 12 c. c., 2 c. c. re-injected followed by 10 c. c. anti-meningococcus serum. After this treatment temperature stayed below 100 and gradually subsided.

On 7th, 8th, and 9th days leukocyte count was from eight to twelve thousand. On 15th and 17th days leukocyte count was from eight to nine thousand.

Patient was discharged on February 27 with no complications other than marked urticaria from serum which occurred on 7th day and lasted until 10th day giving considerable itching and discomfort. Peculiar incident of this case was there did not seem to be a great deal of spinal pressure. Patient was practically unconscious first 24 hours in the hospital. Complained of deafness and inability to see during the third

and fourth days after which hearing cleared up but eyes were sensitive to light. Kernig and Brudzinskiss signs were positive second 24 hours in the hospital. Skin was hypersensitive. Patient recovered without complications.

CASE REPORT

Case No. 2—W. N. P.

Admitted to hospital on stretcher 10:45 p. m. February 14, 1931.

Complaint: Had a chill about an hour ago, slight headache, nauseated.

History: Sophomore, age 19, room 212, barrack No. 1, weight 141 lbs., height 66 1-2 inches. Was feeling bad afternoon of same day, had chilly sensation on leaving the picture show at the Y. M. C. A. in the afternoon. Has never had any serious illness, injury, or operation. Family history negative.

Physical Examination: Robust, well-nourished, fair complexion, intelligent looking individual. Throat slightly red. Heart and lungs normal. Slight macular eruption over body. Kernig and Brudzinskiss signs negative. Temp. 102 3-5, pulse 108, resp. 22. Leukocyte count at 10 a. m. 21,400, polys. 78 per cent. 2 p. m. leukocyte count 18,200, polys. 85 per cent.

Progress Notes: 7 p. m. leukocyte count 22,400, polys. 81 per cent. 9 p. m. 18 c. c. spinal fluid withdrawn, slightly cloudy in appearance, 4 c. c. spinal fluid re-injected, followed by 12 c. c. anti-meningococcus serum immediately. 11 p. m. temp. 100, pulse 96.

2nd day: 12 mid night patient delirious, complained of violent headache, temp. 102, pulse 96. 32 c. c. spinal fluid withdrawn, 6 c. c. spinal fluid re-injected followed by 15 c. c. anti-meningococcus serum. 40 c. c. 50 per cent glucose and 50 c. c. saline given intravenously. 9 a. m. temp. 98 2-5, pulse 100, leukocyte count 24,000, polys. 93 per cent. 42 c. c. spinal fluid withdrawn, 8 c. c. spinal fluid re-injected followed by 15 c. c. anti-meningococcus serum. 15 c. c. 50 per cent glucose given intravenously. 12 m. temp. 98 2-5, pulse 88, resp. 18. 7:15 p. m. 15 c. c. anti-meningococcus given intravenously followed by itching sensation over the body.

3rd day: 8 a. m. 15 c. c. spinal fluid withdrawn, 3 c. c. spinal fluid re-injected followed by 10 c. c. anti-meningococcus serum. 11 a. m. leukocyte count 16,800, polys. 75 per cent. 45 c. c. 50 per cent glucose given intravenously.

4th day: 15 c. c. spinal fluid withdrawn, 3 c. c. spinal fluid re-injected followed by 12 c. c. anti-meningococcus serum. 4 p. m. leukocyte count 11,600, polys. 74 per cent. Temp. 100, pulse 88.

5th day: Temp. 99, pulse 68. 40 c. c. 50 per cent glucose and 80 c. c. saline given intravenously.

6th day: Temp. 98 2-5, pulse 58. 40 c. c. 50 per cent glucose and 80 c. c. saline given intra-

venously. Leukocyte count at 4 p. m. 11,600, polys. 74 per cent. Patient's temperature never went above 99 after 5th day. Second 24 hours patient was delirious and wild. Second and third treatments were given under an anaesthetic, fourth and fifth treatments in usual way. Patient had an involuntary movement during 2nd day and had to be catheterized. Patient complained of inability to see and hear throughout fourth day. Retinitis was present and lights had to be shaded. Beginning of 2nd 24 hours Kernig and Brudzinskiss signs were positive. Serum reaction appeared on the 7th day and lasted until 10th day. Skin was hypo-sensitive. Patient was discharged on 19th day as cured and recovered without complications.

CASE REPORT

Case No. 3—D. H. K.

Admitted to the hospital at sick call on March 13, 1931.

Complaint: Feeling bad. Temp. 99 2-5, pulse 88.

History: Junior, age 20, room 405, barrack no. 2, weight 106, height 65 inches, a boxer. Began feeling bad during the night, unable to sleep well, no particular complaint. Has never had any serious illness, injury, or operation. Family history negative.

Physical Examination: Medium size, well-nourished, intelligent looking individual. Throat slightly red, evidence of acute cold. Heart and lungs negative. Kernig and Brudzinskiss signs negative. Urinalysis normal, leukocyte count 12,400, polys. 82 per cent.

Progress Notes: 10:30 a. m., same day of admission, became nauseated and vomited. Vomited again at noon. 2:20 p. m. complained of severe headache and continued to vomit. Temp. 102 2-5, pulse 106. At 3:30 p. m. spinal puncture performed, 15 c. c. spinal fluid withdrawn, 3 c. c. spinal fluid re-injected followed by 10 c. c. anti-meningococcus serum. Spinal fluid practically clear. Laboratory report showed meningococcus present. 11 p. m.—37 c. c. spinal fluid withdrawn, 7 c. c. spinal fluid re-injected followed by 20 c. c. anti-meningococcus serum. 40 c. c. glucose and 45 c. c. saline given intravenously. 10 a. m.—temp. 98, pulse 92. 35 c. c. spinal fluid withdrawn, 7 c. c. spinal fluid re-injected followed by 24 c. c. anti-meningococcus serum. 40 c. c. glucose and 50 c. c. saline given intravenously. 4 p. m.—Glucose 20 c. c. and saline 180 c. c. given intravenously. 6 p. m.—15 c. c. anti-meningococcus serum administered intravenously.

2nd day: 9 a. m.—Leukocyte count 12,400, polys. 82 per cent. 2 p. m.—12 c. c. spinal fluid withdrawn, 2 c. c. spinal fluid re-injected followed by 8 c. c. anti-meningococcus serum.

3rd day: 11 a. m.—Leukocyte count 10,000, polys. 71 per cent. Patient's temperature after the first day never went above 100 which was

probably due to the serum being given eight hours after his admission to the hospital. Patient was never really unconscious, was slightly delirious at times during the first 24 hours. Complained of inability to hear and said the light hurt his eyes. Kernig and Brudzinskiss signs were less than in other two cases and disappeared earlier. Patient was discharged on 11th day of illness with defective hearing in left ear and was referred to an eye, ear, nose, and throat specialist. His Mother stated that he had always had trouble with his left ear since a child. Eruption over body appeared about the 15th day as a result of serum administered during his stay in the hospital which was not severe. Skin was hyper-sensitive.

CASE REPORT

Case No. 4—W. A. B.

Admitted to the hospital at sick call on April 11, 1931.

Complaint: Feeling bad. Temp. 98 2-5, pulse 88.

History: Junior, age 20, room 107, barrack No. 1, weight 146, height 68 1-2 inches. Had headache night before but headache disappeared this morning and he had no pain. Has never had any serious illness, injury, or operation. Family history negative.

Physical Examination: Tall, slender, fairly well-nourished, intelligent looking individual. Throat normal, heart and lungs normal. Kernig and Brudzinskiss signs negative.

Progress Notes: At 5 p. m.—nauseated and complained of headache. Temp. 99, pulse 88. Leukocyte count 10,400, polys. 84 per cent. 7 p. m.—vomited, complained of severe headache and had a chill. 8 p. m.—temp. 104 3-5, pulse 82. Leukocyte count 16,000, polys. 88 per cent. 9 p. m. Spinal puncture performed, 27 c. c. spinal fluid withdrawn, 5 c. c. spinal fluid re-injected followed by 20 c. c. anti-meningococcus serum. Spinal fluid slightly cloudy. Laboratory report later confirmed diagnosis of meningitis. 12 m.—Temp. 100 4-5, pulse 82 per cent. 150 c. c. sahne and 100 c. c. glucose given intravenously. 3 a. m.—40 c. c. spinal fluid withdrawn, 8 c. c. spinal fluid re-injected followed by 30 c. c. anti-meningococcus serum.

2nd Day: 9 a. m.—temp. 99, pulse 80. Leukocyte count at 10 a. m. 12,600, polys. 83 per cent. 9 p. m.—26 c. c. spinal fluid withdrawn, 5 c. c. spinal fluid re-injected followed by 18 c. c. anti-meningococcus serum. Temp. 99 1-5, pulse 88.

3rd day: 9 a. m.—leukocyte count 13,200, polys. 75 per cent. 20 c. c. spinal fluid withdrawn, 4 c. c. spinal fluid re-injected followed by 15 c. c. anti-meningococcus serum. 12 n. temp. 98, pulse 88.

4th day: Temperature ranging from 99 1-5 to 99 4-5. Leukocyte count 11,400, polys. 83 per cent. 33 c. c. spinal fluid withdrawn, 6 1-2 c. c.

spinal fluid re-injected followed by 20 c. c. anti-meningococcus serum.

5th day: Patient had a relapse. Temp. at 5 p. m. 102 4-5, pulse 112. 6 p. m. 32 c. c. spinal fluid withdrawn, 6 c. c. spinal fluid re-injected followed by 20 c. c. anti-meningococcus serum.

6th day: 6 a. m.—Glucose 50 c. c. and saline 50 c. c. given intravenously followed by a chill. 12 n. temp. 98 4-5, pulse 72. 4:30 p. m.—leukocyte count 20,000, polys. 90 per cent.

Temperature continued to drop and fluctuate until 13th day. Patient appeared to improve. Spinal fluid was clear and pathological report was negative but patient continued running temperature. On the 19th day leukocyte count was 17,000, polys. 82 per cent, temp. 102 2-5, pulse 108 at which time the second relapse occurred and the treatment was resumed. 18 1-2 c. c. spinal fluid withdrawn, 2 c. c. spinal fluid re-injected followed by 12 c. c. anti-meningococcus serum.

20th Day: 5 p. m.—leukocyte count was 14,000, polys. 94 percent.

22nd Day: Leukocyte count 10,400, polys. 79 per cent. Temp. 99 4-5. Patient showed positive Kernig and Brudzinskiss signs at the beginning of second 24 hours, being more marked than the other cases with almost complete loss of elbow and knee reflex. Skin was hypo-sensitive. He also had impairment of hearing and vision which cleared up about the 15th day. This case was unlike the others in that there was tendency for relapse. Patient was discharged on the 29th day of illness with no complications as cured. The treatment probably should have been continued intra-spinally on the sixth day. The diagnosis was confirmed in all cases by an excellent Bacteriologist.

CONCLUSIONS

In conclusion, I believe (1) That an early diagnosis is very essential in the length of time for recovery and progress of the patient. (2) Spinal punctures are just as essential for the relief of intra-cranial pressure as the decompression used in cranial fractures to relieve that pressure. The amount of fluid withdrawn should be sufficient to give relief from intra-cranial pressure whether that amount be 10 c. c. or 42 c. c. (3) The spinal fluid re-injected may help to form anti-bodies which are an essential aid in overcoming infection and producing immunity. (4) Glucose and saline in sufficient amounts are of great benefit in aiding sleep and comfort of the patient, and probably have some special action in alleviating some of the nervous symptoms present. (5) In any case where there is unusual headache and elevation in the leukocyte count, vomiting of an unusual type with straining, and absence of other findings, a spinal puncture should be performed for diagnosis. If there is any question as to the cloudiness of the spinal fluid, serum should be administered immediately. These steps should

be taken whether there be meningitis in the community or not. (6) Spinal punctures can be performed under aseptic conditions, with the patient in the proper position, with some experience, with comparatively no danger to the patient. (7) A great many authorities state that heart stimulants are not indicated. To this contention I must disagree. We invariably used digifolin and —when indicated— caffeine sodium benzoate. (8) Another general impression which I have found to be fallacious is that cerebro-spinal meningitis is always accompanied in the early stages by a low pulse rate. In all of the cases cited, the pulse rate was above normal in the first 24 hours and then below normal. (9) Highly efficient nursing and careful psychological treatment are of the utmost importance in handling cerebro-spinal meningitis.

*ACUTE INFLAMMATORY JOINT DISEASE

(Arthritis)

Caused by Type I Pneumococci

And treated with Felton's Anti-Serum

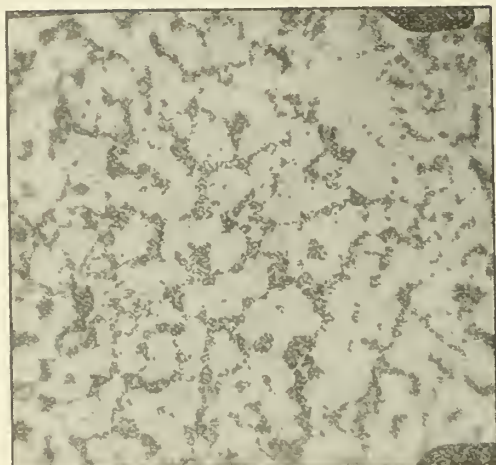
By Jack C. Norris, M.D., Asso. Prof. of Pathology, Emory University, Atlanta, Ga.

In general, the acute joint inflammations, such as rheumatic fever and arthritis, are believed to be the result of infectious agents and their toxins. The organisms incriminated are the streptococcus haemolyticus, pyogenes, viridans, and the diplococcus rheumaticus. Occasionally, the staphylococcus is indicted.

The literature reviewed indicates that acute rheumatic joint disease resulting from pneumococci is rare. Cecil¹ states that the pneumococcus may be the etiological agent. Osler² writes that arthritis may precede or follow pneumonia. Pemberton³ in his recent book states that an arthritis may follow pneumonia. Each of these authors deal with the subject briefly. It is interesting to observe that neither Jordan⁴, Thompson⁵, or Howard⁶, all of whom are recent investigators of the etiology of rheumatic joint disease and arthritis, make any mention of pneumococci causing either of these conditions. Howard alone investigated the etiology of 241 cases.

The following case is presented in which there was an acute inflammatory disease in-

^{*}From the Department of Pathology and Internal Medicine, Emory University, Atlanta, Ga.



H. P. F. showing organism obtained from blood-agar plate. Gram's stain

volving numerous joints. From the blood stream I recovered on two occasions a pleomorphic gram positive coccus which I believed to be pneumococci, Type 1. The patient was treated with Felton's Type I anti-serum.

L. T., FEMALE OF 24 YEARS. Admitted to hospital on February 28, 1931.

Chief complaint: "Pain in joints, stiffness, and abdominal pain."

Present illness: On February 23, after a period of discomfort existing for two days, characterized by nausea, vomiting, and fever, she suddenly developed pain in many of her joints. These pains became severe and in a few days she could hardly move the joints of her arms and legs. During the onset her fever was high and she experienced four or five chills.

Past history: The patient had pneumonia in 1929. She had an abdominal operation in 1930. In December, 1930, she was ill three weeks again with pneumonia. Since the last attack she had felt unwell and has had a cough which was productive of a tenacious sputum.

Physical examination: Examination showed a well developed and fairly well nourished female about 24 years of age, lying in bed supinely. Whenever she moved her body she complained of pain. Temperature registered 100 degrees; pulse rate 84; respiration 84; blood pressure 105 systolic and 75 millimeters diastolic.

The examination of head, ears, eyes, nose, and throat revealed nothing abnormal.

The chest examination revealed an equal expansion of the two sides. There were no areas of abnormal dullness upon percussion. In general, the breath sounds were poorly heard. There was a granular quality to the breath sounds when auscultated in the left lower axillary line at the base. At the left lung base below the ninth rib posteriorly, there were heard many moist, fine rales, especially after coughing.

The heart was not enlarged. The apex impulse was not felt or seen. There were no audible murmurs or friction rubs.

The abdomen, upon pressure, revealed a generalized sensitivity. *The liver and spleen* were not palpable.

The extremities, especially the fingers and other joints, seemed slightly swollen and, upon pressure or flexion, the patient complained of pain. About the joints there seemed to be a redness extending upward and away therefrom, which was seemingly a lymphatic reaction. There was a swelling of the feet and ankles, suggestive of edema, but no pitting upon pressure.

The reflexes, so far as could be determined, were all normal.



H. P. F. Organisms after culture in dextrose beef broth. Note atypical short chains.

PROGRESS NOTES:

March 3, 1931: Joints painful. There are subcutaneous nodules palpable on both fore-arms along the ulna side.

March 12, 1931: A systolic murmur is heard best over the pulmonic valve area of the chest. The patient has not responded to salicylates. An abdominal pain is complained of; the patient has had this discomfort for one year. The roentgenogram reveals a gastric ulcer. The blood culture is positive today for *short chain slight encapsulated streptococci with hemolytic qualities*.

March 16, 1931: The positive culture is reported to be a pneumococcus, Type I (agglutination). Conjunctival petechiae are present.

March 19, 1931: Subsequent blood culture shows identical organism as previously reported; it is immediately agglutinated by Type I anti-pneumococci anti-serum.

March 20, 1931: Temperature remains septic.

WHITE CELL COUNTS:

March 2, 1931: Total white cells 12,450 per cubic millimeter. Polymorphynuclears, 75 per cent.

March 5, 1931: Total white cells 17,100 per cubic millimeter. Polymorphynuclears, 91 per cent.

March 9, 1931: Total white cells 13,900 per cubic millimeter. Polymorphynuclears, 80 per cent.

March 27, 1931: Total white cells 6,800 per cubic millimeter.

March 31, 1931: Total white cells 7,200 per cubic millimeter.

The Fever Course: Following admission, the fever ranged from 103 degrees to 105 degrees. During the interim from March 6 to March 13 her fever was irregular, recording 98 degrees at times and again up to 102 degrees. From March 14 to March 22 there was an irregular but gradual decline after anti-pneumococci serum therapy. On March 22, after 10 cc. of Felton's anti-pneumococci Type I anti-serum was administered intravenously, the fever rose to 102 degrees and dropped within 24 hours to 98 degrees.

Since that date there has been no elevation of the temperature above 98 degrees. On April 20, her temperature was still normal.

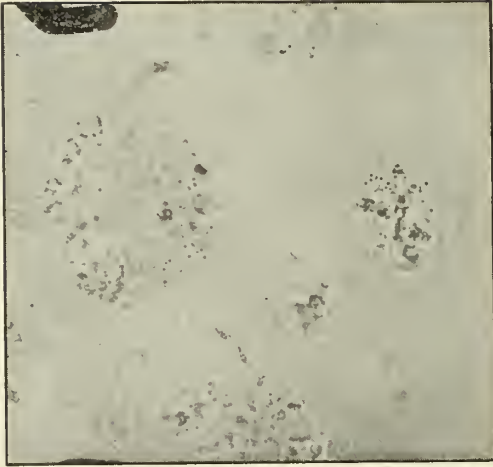
Bacteriology:

The organism was found in the first blood culture after 48 hours of growth in a dextrose boullion made from fresh, ground beef, which was faintly alkaline in reaction. The blood cells were hemolyzed. The smears therefrom revealed a short chain atypical streptococcus which retained gentian violet. Inasmuch as some of the organisms seemed to have a faint capsule, it was suspected that they might be pneumococci. Transference to blood agar encouraged a growing colony with the slightest elevation and of a grayish white color. The very young colonies were almost colorless, but became faintly grayish-white as they grew older. After several days the colonies were numerous and confluent, and the homogenous growth appeared slightly granular. There was a tendency for the peripheral colonization to be fine, irregular, and spreading, while the growth just away from the periphery tended to be elevated. There was no hemolysis of the red cells in the agar. Smears from the plate showed cocci that simulated staphylococci, excepting a few organisms which were typically diplococcoid and thinly encapsulated.

A homogenous well-mixed quantity of the agar-cultured organism mixed in normal saline against a 1-15 dilution of Mulford's anti-pneumococci anti-sera of Types I, II, III, was added to individual units that gave an immediate agglutination of the organism with Type I anti-serum. The other sera did not ag-



H. P. F. Demonstrating faint encapsulation.



H. P. F. Agglutination of organism by Type I antipneumococcic antiserum

glutinate the cocci in any dilutions. This experiment was repeated and the second positive culture was likewise checked and identical results obtained. Felton's Type I and II mixed anti-serum likewise gave an immediate agglutination.

In the sugar media the organism grew very poorly, but after about 4 days reactions were observed. It was noted that acid was formed in dextrose, maltose, and sacchrose; inulin was made slightly acid. Mannite did not seem affected. In those media which encouraged its growth the organism was examined after gram's stain and again showed some short atypical streptococci. The bile solubility test was unsatisfactory.

The hemolytic action of the organism in the beef broth culture was most interesting. It was not observed upon subsequent blood agar plates. I cannot explain this phenomenon. It was first noted by Sickles and Coffey⁷ in 1928.

Discussion:

In this patient I believe I have ample evidence to incriminate an acute joint disease, probably an acute arthritis, the etiology of which was Type I pneumococci. The incriminating facts are:

- 1—Previous history of pneumonia in the patient.
- 2—Two positive blood cultures of the same organism during febrile stages.

- 3—The agglutination of the organism with two different Type I anti-sera on different occasions.
- 4—The cultural characteristics of the organism.
- 5—The immediate response and recovery of the patient after administration of the Type I anti-serum.

The report is made because of the *rarity of such joint infection*; the *pleomorphology of the coccus*; and to suggest that, instead of approaching the acute rheumatic cases with the fixed vision within our minds of the *streptococcus hemolyticus as the cause*, it may be wise to resort to detail laboratory differentiation of our cultured cocci so as to be sure that we are not overlooking pneumococci Type I, for which we have a *well proven specific*; and to reveal the specificity of *Felton's serum in this case*.

As to the true diagnosis of the patient's disease, I am simply calling it acute inflammatory joint disease. Among the visiting physicians and the internes the diagnoses equally suggested were acute rheumatic fever and acute infectious arthritis. The gratifying therapeutic results cut short months of untold suffering and bedside observation; thus, obviating a final clinical classification.

The interne noted on April 4, 1931, "Temperature 98 degrees; pulse 76 per minute; respiration 20 per minute. Patient feels very good today. No pain or swelling of joints. She desires to sit in chair."

On April 14, 1931, I saw her conversing in the corridor with friends—seemingly well.

On April 20, a minute examination of her joints revealed no tenderness, swelling, or any sign of a previous inflammation.

Box 221,
Decatur, Georgia.

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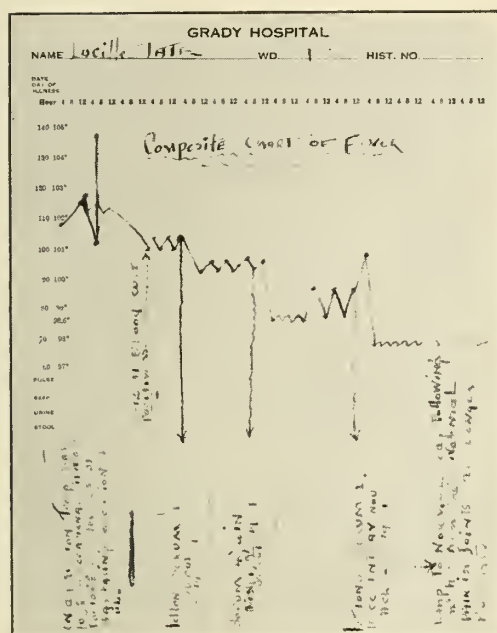


Illustration chart of temperature and results following administration of Felton's antipneumococcal Type I antiserum

Rheumatic Fever, *J. Infec. Dis.*, 43: 484, 1928.

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SPARTANBURG COUNTY MEDICAL SOCIETY, OCTOBER 27, 1931 IN MEMORIAM

Joseph W. Allen has passed into the great beyond.

Confronted by insuperable odds, and realizing the approach of the inevitable, he continued his daily work until the end. Perhaps the manner of his going was as he would have chosen—suddenly and while in the line of active duty.

Of friends he had made many, faithfulness and kindness characterized his ministrations. The highest ideals dominated his professional conduct.

The members of the Spartanburg County Medical Society share the sorrow of those who mourn him, and extend their sympathy to his bereaved family.

J. J. Lindsay, M.D.
Geo. E. Thompson, M.D.
James L. Jeffries, M.D.

MEDICAL SOCIETY IN MEETING AT CHESTER

Chester, Nov. 1—The Fifth District Medical society convened in this city Wednesday with an excellent attendance. Dr. Samuel Lindsay, of Winnsboro, presided. It was voted to hold the spring meeting at Rock Hill.

The following interesting program was enjoyed:

Dr. Hugh Smith, of Greenville, "Primary Hypochromic Anaemia"; Dr. W. J. Henry, of Chester, "Glandular Fever"; Dr. Hobert Seibels, of Columbia, "Use of a Perineal Retractor in Breech Deliveries"; Dr. Robert W. McKay, of Charlotte, N. C., "Urological Problems of the General Practitioner"; Dr. T. K. Pitts, of Columbia, "X-ray Pictures"; Dr. W. E. Simpson, of Rock Hill, "Methods of Diphtheria Immunization"; Dr. R. E. Abell, of Chester, "An Unusual Case of Intestinal Obstruction"; Dr. W. R. Wallace, of Chester, "Case Reports"; Dr. H. E. Herlong, of Rock Hill, "Kidney Colic: Some of the Causes and Treatments."

LAURENS COUNTY MEDICAL SOCIETY

Dr. Benedict Mayer of Columbia was a special guest of the Laurens County Medical association at its meeting held at Laurens, S. C., Oct. 26, 1931. Dr. Mayer is one of the rapidly rising younger physicians of Columbia, having had part of his training in noted European schools. He is a son of the late Dr. O. B. Mayer of Newberry, one of the most eminent physicians in this part of the state, and a grandson of Mrs. Lou Fleming Jones of Laurens. Dr. Mayer read a professional paper on gastric ptosis, which is the condition commonly described by laymen as fallen stomach.

The meeting was held in the office of Dr. R. E. Hughes, president of the association. Those present were Dr. Bearden, Dr. Teague, Dr. Vincent, Dr. Ariail, and Dr. Hughes of the local medical fraternity; Dr. Lee Young and Dr. Davis of Clinton; Dr. Pace of Gray Court; Dr. Fennell of Waterloo; and Dr. Martin of Goldville, secretary of the association. Dr. Adams of Fountain Inn was a non-participating guest at the meeting. This was the first meeting in some months, as the association suspends activities during the summer, and in celebration of the gathering together again, Dr. Hughes served refreshments and smokes, to the general surprise and pleasure of the members.

SOUTH CAROLINIANA

J. I. Waring, M.D., Charleston, S. C.

Glaucoma Surgery—J. W. Jervy, Greenville. South. M. J. 24, June, 1931, p. 539.

A consideration of the rationale of glaucoma surgery is followed by a description of the operation used by the writer. His operation, used on cases with a shallow anterior chamber, reduces the tension by opening up the canal of Schlemm.

The Injection Method of Treating Hemorrhoids—Thos. Brockman, Greer—Sou. Med. & Surg., 93, Feb. 1931, p. 96.

The author notes the indications for the injection treatment and describes its technique, and also the palliative castor oil-nupercain injections. He remarks on the necessity of thorough examination, since rectal disease is often not of local origin, and closes with the statement that "bran, roughage and purgatives bring more patients to the proctologist than any other things we know of in such general use."

Pulmonary Abscess—Hugh S. Black, Spartanburg. Sou. Med. & Surg. 93, Mar. 1931, p. 192.

A report of four cases successfully treated, two by thoracotomy and two by postural drainage.

X-Ray Visualization of a Calcified Gall-Stone in a Child Seven Years Old—Hillyer Rudisill, Jr., Charleston—Radiology 16, June, 1931, p. 942.

This paper reports an unusual case and describes the methods by which the stone was located in the gallbladder. Operation confirmed the diagnosis.

The Orthopedic Care and Treatment of Acute and Chronic Anterior Poliomyelitis—R. A. Blakey, Greenville. Sou. Med. and Surg. 93: Mar., 1931, p. 18.

A resume of the treatment from diagnosis to deformity.

Pathological Anatomy as the Keystone of the Practice of Clinical Pathology—Kenneth M. Lynch, Charleston—Am. J. of Clin. Path. I, July, 1931, p. 277.

In this Presidential Address before the American Society of Clinical Pathologists, Dr. Lynch suggests that as the result of current medical training in the use and evaluation of laboratory procedures, there will be increasingly less need for the clinical pathologist as a specialist, except as a matter of convenience to a group. Tissue pathology, however, requires particular study and will probably continue to demand a specially trained "practicing pathologist" for its interpretation to the profession.

Experiences with Spinal Anesthesia, Douglas Jennings, Bennettsville—Sou. Med. & Surg. 93, Mar. 1931, p. 175.

Personal and very favorable experience with spinocaine and gravocaine in a variety of surgical procedures, chiefly below the belt.

Blood Hemoglobin in Thyroid Enlargement—Roe E. Remington, Charleston—Proc. of the Amer. Soc. of Biol. Chemists, 1931, p. 79.

South Carolina is recognized as a relatively non-goitrous area. This reputation is based on examination of 18,000 school children, and inferentially on analyses which show a relatively high iodine content in plants grown in this region. Basal metabolism determinations on normal people in South Carolina, however, show values lower than the accepted standards. Three determinations were made on different days, on each of 93 white student nurses at Charleston. When the lowest value for each subject is used, the average is 10.4 per cent lower than the Aub-Dubois standard. On these same women, the average red blood cell

count was 5.01 millions, hemoglobin 12.4 gm. per 100 cc.

Similar values for seventeen negro girls with marked thyroid enlargement (high school students, ages 15 to 22) were minus 14.0 for lowest values, and 4.04 millions red cells and 9.3 gm. of hemoglobin.

Dr. Remington suggests that the lack of leafy vegetables in the diet is responsible for the iodine deficiency, producing goiter, and other mineral deficiency producing anemia.

Chronic Exfoliative Dermatitis—J. R. Allison, Columbia. South. M. J. 24, Oct. 1931, p. 860.

Dr. Allison reports three cases, the first of allergic origin, the second (which was treated with at least transient improvement by artificial malarial infection) probably allergic, and the third and fatal case of undetermined etiology. Full autopsy findings are given for the last. The author suggests that the cause of the disease lies in a toxemia, possibly following some abnormality in the liver after the original irritant has been removed.

Mongolism In One of Twins—J. I. Waring,

Charleston. Am. J. of Dis. of Child, 41, Feb., 1931, p. 351.

An illustrated report of the appearance and development of dissimilar twins, one a mongolian idiot, the other normal. Comparative measurements are given.

Spontaneous Pneumothorax. R. B. Taft and J. P. Palmer, Charleston J. A. M. A. 96, Feb. 28, 1931.

Five cases of pneumothorax, one of which was complicated by hemothorax, are described. All recovered, all occurred suddenly, and none showed any pathologic changes which might explain the origin of the condition.

Dr. J. C. Nott and the Transmission of Yellow Fever—Robert Wilson, Charleston. Annals of Med. Hist. New Series 3, Sept., 1931, p. 514.

From a review of certain passages in the writings of Nott, Dr. Wilson concludes that credit is due this Alabama physician for his clear idea of the essential nature of the causative agent of yellow fever, but that he did not actually recognize that the mosquito was the vector of the disease.

COLUMBIA MEDICAL SOCIETY

Meeting called to order by the President, Dr. James S. Fouche, at 8:45 P. M., October 12, 1931.

Minutes of last regular scientific meeting read and adopted.

No clinical case reports.

Dr. George K. Nelson's application for membership to the society received.

The guest speaker of the evening was Dr. William A. Frontz of the Johns Hopkins Medical School Baltimore introduced by Dr. W. R. Brown.

His subject was Hematuria with Special Reference to the Diagnosis of Conditions Causing it. He brought out the many causes of hematuria saying that tumor of bladder caused 34 per cent of his causes. Stricture of the ureter was not very common. Importance of repeated examination. Stone in ureter showed microscopical blood in urine but not often gross blood. Importance of early diagnosis and treatment. The removal of malignant growths afterward by the use of deep radium therapy or in kidney use deep X-ray therapy 1st then remove. His talk and paper were illustrated with lantern slides.

The discussion of the paper was opened by Dr. Marion H. Wyman. Others discussing Dr. Frontz' subject were Dr. W. R. Barron, Dr. Grantham of Asheville, Dr. Weinburg of Sumter and Dr. Heyward Gibbes. Dr. Frontz closed the discussion.

Dr. Hugh Wyman announced that the members of the Columbia Medical Society were invited to the South Carolina Urological Association meeting Tuesday A. M. 10-13-31 from 10 A. M. to 1 P. M. and 8:30 P. M. held in the Crystal Room at the Hotel Columbia.

There were the following visitors present to the meeting:

Dr. H. E. Landis of Baltimore, Md.

Dr. Milton Weinburg of Sumter, S. C.

Dr. G. F. Roberts of Lexington, S. C.

Dr. DuBose of Bishopville, S. C.

Dr. Ballenger of Batesburg, S. C.

Dr. Price Timmerman of Batesburg, S. C.

Dr. Gibson of Batesburg, S. C.

There were 62 members of the society present. Society adjourned at 10:30 P. M.

Respectfully submitted,

William Weston, Jr., Secretary.

S U R G E R Y

Wm. H. Prioleau, M.D., Charleston, S. C.

"CERVICAL RIB"

Cervical rib, though of rather rare occurrence, is of sufficient importance to warrant our consideration. The condition is a developmental anomaly, the etiology of which is uncertain. The complete cervical rib extends laterally from the seventh lateral vertebral process for varying distances, then turns forward and downward behind the scalenus anticus muscle to meet the costal cartilage of the first rib. There are various degrees of development. The brachial plexus and the subclavian artery arch over the rib; they are thus subject to pressure between it and the scalenus anticus muscle. Should the pressure be great enough it produces symptoms.

The symptoms are generally manifested in young adult life. The characteristic ones are pain, hyperesthesia, atrophy, motor weakness, disturbances in sensation, and circulatory anomalies. These occur in the arm on the affected side. They vary to a certain extent depend-

ing upon the amount of pressure over the subclavian artery and the brachial plexus. X-ray examination demonstrates the presence of the cervical rib.

Treatment for the condition consists in relieving the pressure. Formerly this was done by resecting the cervical rib. This procedure is quite difficult and is accompanied by danger of injury to the brachial plexus. However it is not necessary to resect the rib, for sufficient relief of pressure can be obtained by dividing the tendinous insertion of that scalenus anticus muscle. This is much simpler and practically free of danger.

The credit for this method of treatment apparently belongs to Dr. Alfred W. Adson of Rochester, Minnesota. He describes the condition in detail in the *Atlantic Medical Journal*, January 1928. Division of the scalenus anticus muscles was performed in eight cases. The results were very good. The author advocates this procedure in preference to removal of the rib.

THE UROLOGICAL ASSOCIATION OF SOUTH CAROLINA

Annual Meeting, Columbia, S. C.,

Held October 12-13

Monday, October twelfth, 8:30 p. m., Columbia Medical Society Meeting, Medical Society Hall, Medical Building.

"Hematuria" with Special Reference to the Diagnosis of Conditions Causing It. (Lantern Slides)—Dr. William A. Frontz, Baltimore, Md.

Urological Meeting Programme

Tuesday, October 13th

10:00 A. M.—Clinics.

"Demonstration"—Use of Diathermy in Treating Malignancies of Bladder and Prostate—Dr. W. R. Barron, Baptist Hospital.

11:00 A. M.—Columbia Hotel.

"Calculi in the Urinary Tract"—Dr. M. H. Wyman.

"Clinico-Pathological Conference"—Drs. Bullock, Boone, and Plowden.

Round Table Discussion of Clinical Cases.

Note—Ample opportunity was given at the clinical session Tuesday morning for all to report cases or present instruments.

1:00 P. M.—Luncheon, Columbia Hotel.

7:30 P. M.—Banquet, Columbia Hotel.

8:30 P. M.—REGULAR SESSION, Columbia Hotel.

"Presidential Address"—Hugh E. Wyman, M. D.

"The State Hygienic Laboratory and the Urologist"—Dr. H. M. Smith.

"The Importance of an Accurate Diagnosis in the Treatment of Bladder Tumors."—Dr. Wm. A. Frontz.

"Certain Aspects of Prostatic Disease"—Dr. L. J. Ravenel.

Business session—Election of officers.

L. P. Thackston, M.D.,
Secretary-Treasurer.

EYE, EAR, NOSE AND THROAT

J. F. TOWNSEND, M. D., F. A. C. S., CHARLESTON, S. C.

THE GRADUAL CHANGE IN THE OTOLOGIST'S CONCEPTION OF THE CONDUCTION AND PERCEPTION OF SOUND IMPULSES.

Dr. Frances P. Emerson Annals of Otology, Rhinology and Laryngology September, 1931, Page 710

The Eustachian tube has been inflated and bougied on the theory of obstruction although no chronic case in which tone perception was gradually lost was ever cured by such treatment or even improved.

In 900 careful dissections at the Howard Medical School there was found only one case of obstruction in the Eustachian tube and that near the mouth of the tube. In fact obstruction would only be expected in tubercular or syphilitic process which are seldom reported.

It is a common clinical experience that sound perception is better following a long continued purulent than a catarrhal process, yet there may be an extensive adhesive process or destruction following the purulent condition.

Hearing is predicted on the theory of the physical propagation of sound impulses by molecular waves.

The new theory is that sound results from electronic vibrations and its impulses are propagated by electricity—sound is therefore due to electronic vibrations, which vibrations are transmitted to receptors. Each receptor is analogous to an electric battery, consisting of a positive and a negative pole generating electricity (Crile) from the receptors. They are transmitted to end organs by nerves of special functions which nerves respond in the same way to irritation, whatever the cause.

With this conception of the transmission of sound impulses we can understand how perception may be impaired by mechanical, chemical or bacterial cause.

Mechanical, as in boiler makers deafness.

Chemical, as from lead, arsenic or tobacco.

Bacterial—if there has been a certain bacterial otological infection a subsequent similar bacterial infection will cause an exacerbation of the original damage.

As with the color sense, so has the hearing sense been built up. First there was one color; red—then four, then all—. So with sound. The hearing becomes a trained sense. This analogy has been strengthened by the similarity of situation of the organ of Corti and of the retina. It was difficult to understand how delicate sound impulses could reach the organ of Corti through a damaged and imperfectly functioning apparatus. Under the new concept this is more readily.

That the sound stimuli acts through electrical impulses affecting the basilar and tectorial membranes, the rods of Corti and the filaments of the auditory nerve, giving us in sound perception; pitch, rhythm and harmony.

Therefore, we must conclude that the conduction apparatus, so called, is simply a protective mechanism and that physical obstruction has nothing to do with the etiology of or progress of the loss in tone perception, its only influence being to retard in some measure the passage of electronic vibrations to the receptor.

There, any obstruction in the eustachian tube or middle ear could have but little effect in preventing the passage of sound impulses by electricity and no influence in affecting a further loss in tone perception. The removal of focal infections helps, a recurrence of the infection harms. Operation on hundreds of cases over 60 years of age for chronic focal infections in the upper respiratory tract where tone perception was being lost have resulted in improvement in hearing.

This fact was brought out clearly by Dr. Rosenow and confirmed by Dr. Haden. Diseases

ed tonsils are injurious to the hearing. The new discovery that electronic vibrations cause sound impulses that are propagated by elec-

tricity presupposes the end results in the progressive loss of tone perception to be nerve deafness.

PUBLIC HEALTH

By B. F. WYMAN, M. D., Director of County Health Work, Columbia, S. C.

REPORT OF COMMITTEE ON PUBLIC HEALTH

The committee on Public Health submits herewith extracts from the proceedings of the White House Conference 1930-31 for consideration of this House of Delegates of the South Carolina Medical Association. We feel that we can make no better report than the findings of this Conference on Child Health and Protection, realizing that this study has been made by the nation's most renowned physicians, scientists and educators. It applies to the public health problems of South Carolina as well as the public health problems of the nation as a whole.

Scientific research by the White House Conference has laid bare facts and proposed new ways. The next group of specialists must seek a way by which this becomes a part of the program for adult education. It is the greatest adventure ever offered in the world of learning and of advancement. It presents the problems of the whole human race, the child unborn, the child in arms, the child in school not yet ready for earning and home-making, and the great mass of our youth. But, most of all, it is for those whose work is to prepare young people for the responsibilities of home-making, child rearing, and citizenship. When any one group accepts responsibility to promote the program of health and welfare there is left an abundance for the next group without danger of overlapping or monopoly.

The goal toward which we aim in this White House Conference is not new. It is merely a new way of doing old things. Its foundation is the golden rule. The golden rule may not say: protect children against communicable diseases; take care of mothers in childbirth; secure pure milk and water; help humanity to adjust itself rather than increase crime, delin-

quency, and dependency; take care of the child limping a little in the race with a handicap—but when it says "love your neighbor as yourself," in modern times, it means these things.

No single recommendation has proved more helpful to children than one made by the First White House Conference, which was at once promptly and enthusiastically approved by President Roosevelt and eventually approved by the Congress. We refer to the recommendation that there should be established in the National Government a bureau to consider the interrelated problems of childhood, child health, dependency, neglect, child labor, delinquency, and, as the statute provides, "the welfare of children and child life among all classes of our people."

A woman may have completed a college course, may be able to speak two or more languages, and yet she may not know how to bathe her first baby, how to estimate the cost of raising her family. She is more often than not ignorant of how to safeguard her own and her family's health with a safe and sane diet purchased within the income. The gospel of instinct is obsolete. The advice of Aunt Hilda and the neighbors has been proven unsafe. Even physicians sometimes differ among themselves. To prepare rightly for family and community life implies the development of individuals more fully qualified for marriage, with a better understanding of the problems of parenthood and the fundamentals of economics and their responsibility as consumers, who, in short, see the home in its broadest aspects as the true nucleus of democratic government.

We are agreed that the death of infants, the ill health of children, dependency, neglect, delinquency, and inadequate preparation for the responsibilities of adult life are all costly to the community.

If we could put into practice what is now known about safeguarding the health of children, preventing dependency and delinquency, providing opportunities for wholesome group activities, we would in a single generation profoundly improve the whole character of our national life. The long, unhappy procession of children who enter adult life physically, socially, and mentally handicapped could be made a much shorter one and the efficiency of our citizens be correspondingly increased.

Our practical problem is not so much to determine whether the child conforms to a standard representing the average of a group, but whether or not he realizes to the fullest possible extent his own inborn potentialities.

There is always a danger also that any standard which is set up may be applied too rigidly to individual cases. We are all familiar with the tables which show the usual relation between the weight and the height of children of different ages. These have been used to determine whether any child is "up to normal weight," with the implication that the child who is found to be underweight is probably undernourished. The work of this Committee shows that deviations from these standards very frequently depend upon differences in the skeletal proportions of the child and that the underweight child very often is simply the child who has a slender chest or narrow hips. We are not ready to set up more complete standards which would take such differences into account; but quite apart from this practical difficulty, we wish to emphasize the danger involved in uncritical acceptance of these standards.

The baby and the young child have been fairly extensively studied from many points of view. There is an important gap in our knowledge, in that the new-born infant and the infant during the first few weeks of life are much less completely understood than the older child. This is particularly unfortunate, because growth and development are most rapid at this period, and in terms of maturity small age differences become very important. Perhaps the very rapidity of change and the instability of physiological adjustments account to some extent for our lack of knowledge con-

cerning this period. The prenatal development of the infant is relatively inaccessible to study, and it is not surprising that we are in relatively gross ignorance of many important aspects of the subject. The other period for which our knowledge is most defective is that of adolescence. It is not generally recognized what profound changes are taking place in the individual both physically and mentally during this period. Not only is there a sudden spurt in growth, but a relative instability in the relationships of the various organ systems appear at this time. Nevertheless, because of the relatively large size of the boy or girl at this age, physicians have usually thought of him or her as practically mature, and have treated them pretty much as adults.

Our present knowledge of nutrition is complete enough and our supply is sufficient so that ill-nourished children are a community responsibility. The same foods are not always of the same composition. We are just beginning to appreciate how variations in the soil can bring about changes in the nutritive value of a given crop. The iodine content, the nitrogen content, the acidity, the calcium, the phosphorus, and the potassium of the soil all cause variations in the plants. Likewise, the quality of the fodder given to cattle profoundly influences the vitamin content of their milk.

Why do we encourage and endorse the use of human milk as the best food for infants? Artificial feeding has proved successful in many cases when we are forced to use it, and even has certain theoretical advantages, in that we may easily increase mineral, vitamin, or protein content if we desire. If mother's milk is inadequate in quantity or quality, as frequently happens under our present living conditions, artificial feeding may be used with fair assurance of adequacy; but most babies still thrive better upon human milk. Perhaps it is some of these as yet unidentified little things which possibly help to develop a resistance to disease by carrying from mother to child small quantities of immune bodies. After all, the experience of the world is our primary guide in the choice of foods, and our scientific knowledge of the subject is really the result of an enlightened empiricism.

DEPARTMENT OF ROENTGENOLOGY

By T. A. Pitts, M. D., Columbia, S. C.

"RADIATION THERAPY AND MALIGNANCIES"

By Hillyer Rudisill, Jr., M.D.,

**Charleston, S. C.*

Malignancies respond to X-ray and Radium in direct proportion to the immaturity of their cells. Since all new growths are more embryonal than normal tissue and it is possible to burn up normal tissue, it becomes apparent that any neoplastic area can be destroyed.

The problem of radiation therapy resolves into putting a lethal dose of rays into the diseased tissues and yet staying under the normal tissue lethal dose.

It is possible, in localized skin malignancies, to shield carefully the surrounding healthy skin and use a large enough dose to destroy the neoplasm. Therefore it would seem that any skin malignancy could be cured. This is practically true, provided the new growth is not too extensive and does not involve vital structures. In the latter case the cure might be worse than the disease, since in the destruction of the malignancy the associated normal structures would also be destroyed. However small, properly spaced doses may partially arrest the more extensive types.

The purely destructive action of X-rays and Radium account for the unsuccessful treatment of gastro-intestinal malignancies and those involving other hollow viscera, such as the bronchial tree. The amount of radiation necessary to cure (destroy) the types of malignancies in these locations almost invariably leads to ulceration and death of the patient from infection.

Having so far stressed the purely destructive action of X-rays and Radium the natural question is why not surgery or electro-surgery. The answer to this is the better cosmetic results of radiation, the sparing of operative shock with no tendency to spread the malignancy into the surrounding normal tissue and blood vessels, and the ability to destroy wandered malignant cells in a wide area of supposedly normal tissue around the lesion.

There is, however, a definite relationship between surgery and radiation that has so far not been fully utilized. Many cases can be more intelligently treated if a surgical approach, exposing the pathology, is made and any hyperplastic or redundant portion of the growth is removed before radiation is begun.

That radiation does not cure the majority of neoplasms is not the fault of the method of technique. Conservatively figured at least half of those presenting themselves for treatment have potential if not actual metastases. There are occasional reports of successful radiation of secondary malignant growths but usually they are not sensitive to radiation. Aside from the lack of response they are so extensive and in such inaccessible locations that it is futile to try and treat them.

Radiation therapy, in early malignancies, offers better and a nearer specific remedy than there is for many common diseases. There will continue to be improvements in X-ray and Radium technique, but the factor that will double the percentage of cures is the education of the laity and physicians to the paramount importance of early diagnosis, and immediate radiation therapy; judiciously combined with proper surgery.

*Roper Hospital, and Medical College of the State of South Carolina, Charleston, S. C.

SOCIETY REPORTS

COLUMBIA MEDICAL SOCIETY

Columbia Medical Society Hall, October 26, 1931.

Meeting called to order by the president, Dr. James S. Fouche, at 8:30 P. M.

Minutes of last regular business meeting read and approved.

Under clinical case reports Dr. Hugh Wyman reported a case of girl 22 years old who was pale and anemic and somewhat bloated with history of masses in the abdomen. No history of hematuria. Case was that of a papillary carcinoma of each ureter.

Committee reports, Dr. F. M. Routh reported for Board of Census regarding application of Dr. M. M. Rice that Dr. M. M. Rice be accepted as a member of the Columbia Medical Society enjoying all rights and privileges of a member. That before the vote is taken Dr. Rice will pay to the treasurer of the Columbia Medical Society \$40.00 to cover dues in arrears and the dues of 1931. The board of census has read these resolutions to Dr. Rice and he agrees that should he resume his connection with the Keeley Sanitarium or again make a connection with an institution which is recognized as unethical by the Columbia Medical Society he will immediately resign his membership in the Columbia Medical Society.

Dr. Heyward moved that a report of the board of censors be accepted. It was passed.

The Board of Censors taking into consideration that the delivery of an address over the radio is a new departure in medicine feels that the ruling on the Society's motion of September 28th, 1931 will set a precedent, therefore, the Board of Censors makes the following recommendations:

First—That the State Board of Health is the official representative of the medical profession in its contact with the laity on communicable diseases and preventive medicine and the Board of Censors feels the bulk of medical propaganda should emanate from that source.

Second—All members of the Columbia Medical Society who are invited to read papers or make addresses to the public over the radio should submit such addresses or papers to the Program Committee of the Columbia Medical Society and shall not deliver same without the Program Committee's approval.

Third—No under stress shall be accorded the individual physician's personal attainments. These lectures should preferably be held under the direction of some ethical institution, such as the State Board of Health, the Medical College

of South Carolina or the University of South Carolina and other recognized institutions.

Fourth—No member of the Columbia Medical Society shall deliver an address or talk over the radio in connection with an advertising program of a commercial nature.

Moved that the report be received as information and approved, seconded, discussed and passed.

Dr. Fouche reported on the committee for employing a stenographer that it would be impractical and suggested to the society that a stenographer not be employed. Motion that the society thank the committee and adopt the report, seconded, discussed and passed.

Dr. Heyward reported on the Duke endowment fund of \$75,000 to be matched by the Baptist Hospital. He read resolutions which propose that 50,000 be given Baptist Hospital and the Columbia Hospital and each match this 50,000. Motion made to adopt this resolution, seconded, discussed by Dr. Pitts and passed.

Dr. M. M. Rice elected a member of the Columbia Medical Society.

Dr. E. L. Madden presented the C. P. C. case as a man 49 who had noticed some enlargement in the abdomen two years previous to the admission to the Hospital in August of the present year. Complained of indigestion with bloating sensation with swelling of feet and abdomen. Dr. Pitts made a few remarks regarding the pathology and Dr. Plowden closed the discussion diagnosing the condition as a congenital polycystic liver with an anemic infar of the spleen. Dr. Madden showed the specimens to the members of the society.

33 members of the society present.

The president announced that Dr. W. A. Muirhead would be the next guest speaker of the society.

Society adjourned at 10:15 P. M.

Respectfully submitted,

William Weston, Jr., Secretary.

JOINT MEETING OF THE RIDGE MEDICAL AUXILIARY AND THE RIDGE MEDICAL SOCIETY

An event which is greatly looked forward to both by The Ridge Medical Society and The Ridge Medical Auxiliary is a joint meeting which is usually held during autumn.

On Monday evening, October 17, at 7 o'clock members of these organizations met, at the home

of Dr. and Mrs. W. P. Timmerman. After a few moments of social contact, the call to dinner was issued. The participants proved themselves equal to the occasion and around the festive board much cheer was also evident.

The Ladies Auxiliary held its regular meeting at this time, and was favored with an instructive talk on Influenza and Pleurisy by Mrs. Minnie G. Jones, Superintendent of the Leesville Infirmary. The Auxiliary gave to the Infirmary some scrap books which they made for entertainment of patients.

Hygeia and Student Loan Fund were discussed and plans were made for the advancement of the same.

RIDGE MEDICAL SOCIETY MEETING

The Ridge Medical Society met in the home of Dr. and Mrs. W. P. Timmerman, Monday evening, October 19, at seven p. m., where an elegant supper was served by the Ladies Auxiliary.

The attendance was good and we had Drs. Harmon of Columbia, Fahey of Johnston and Traylor and Harrell and Mealing of Augusta as our visitors. All of these added greatly to the meeting.

Dr. D. B. Frontis exhibited a case of Vitiligo in a young white girl which elicited much interest and was discussed by Drs. Gibson, Brunson, Harrell and W. P. Timmerman.

Dr. W. P. Timmerman exhibited a young negro man with a dilated ear which was discussed by Drs. Frontis, Ballenger, Gibson, Fahey and Mealing. The treatment advised was rest, iodides, mercury, salvarsan, and digitalis.

Dr. R. H. Timmerman offered resolutions on the death of our aged member Dr. J. W. Geiger which were unanimously adopted.

Dr. D. M. Crosson read a eulogy of Dr. J. W. Geiger.

The resolutions and eulogy were ordered recorded in our minutes. Dr. J. W. Geiger died, August 21, 1931, in his one hundredth year.

Dr. George Traylor of Augusta read an interesting concise and instructive paper on uterine hemorrhage.

Dr. Harmon in discussing Dr. Traylor's paper criticised the use of the curette and advised the use of the cautery.

He said that lacerated cervixes should be amputated and not repaired. He also commented on the fact that the death ratio of pregnant and parturient women was greater in the United States than anywhere else and that it was greater in South Carolina than in any other state.

Dr. Gibson questioned the percentages quoted by Drs. Harmon and Traylor as to the frequency of cancers in women.

Dr. W. P. Timmerman called attention to the fact that such a large percentage of pregnant

and parturient women failed to have the services of a physician.

Dr. F. G. Asbill thought that some physicians exhibited too much business and too little science.

Dr. Ridgell (Dentist) eulogized the physicians for the great services they have and were rendering the worthy and the unworthy.

Dr. Frontis condemned the practice of examining the sexual organs of women per the rectum. Drs. Gibson and Timmerman concurred in his criticisms.

Dr. Traylor also discussed the use of Radium, X-Ray, Injections of Lead, etc.

He said, "Give people hope, lacerations can't always be prevented."

He said the country doctor should be commended rather than criticised as he wasn't properly remunerated for his services.

The society voted its thanks to the Ladies Auxiliary for its excellent meal, etc.

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL TUESDAY EVENING, OCTOBER 13th, 1931, AT 8:30 O'CLOCK

The meeting was called to order by the Vice President, Dr. H. W. de Saussure.

Present:

Doctors: A. E. Baker, Jr.; Beach; Beckman; Buist; Burn; Byrnes; Cain; Cannon; Chamberlain; Deas; de Saussure; Finger; W. H. Framp-ton; F. B. Johnson; Lynch; McCrady; Maguire; Mazyek; Mitchell; O'Discoll; E. L. Parker; W. H. Price; Prioleau; Ravenel; Richards; Rutledge; Sams; Scott; J. E. Smith; W. A. Smith; Speissegger; Sughrue; Taft; Townsend; Waring; I. R. Wilson, Jr.; Robert Wilson. (37).

Guests: Dr. J. F. Murphy, and Dr. W. S. Sargeant, U. S. Navy Yard; Dr. W. E. Gower, of the Medical College; members of the Interne Staff.

The minutes of the meeting of June 23rd were read and confirmed.

The Secretary read applications for membership from Doctors Eleanor Townsend, Paul H. Culbreath and Dr. W. C. Gamble. These were referred to the Board of Censors.

The Secretary announced that Dr. Hillyer Rudisill, whose application for membership had been approved by the Board of Censors, was now eligible for election. Ballots were taken and Dr. Rudisill was unanimously elected a member.

A letter from Dr. G. S. T. Peebles, requesting transfer from the Berkeley County Medical Society, was read. It was moved, seconded and carried that Dr. Peebles be received by transfer from the Berkeley County Medical Society.

Under Miscellaneous Business, Dr. A. J. Buist brought up the matter of reporting deaths on the various services, calling attention to the fact that

it was necessary to determine as accurately as possible whether or not a patient died a surgical or a medical death, as this matter was of great importance in making up the Duke Report. He said that he realized that this matter should properly come before the Staff, but thought it might be a good time to bring it to the attention of the members so that they would report as carefully as possible in order that the report of the hospital statistician might be more accurate.

The Acting President stated that it was his sad duty to announce the death of Dr. C. W. Kollock on September 23rd, 1931. It was moved, seconded and carried that the Chair appoint a committee to draw up resolutions of respect to the memory of Dr. Kollock. The Chair appointed the following: Dr. Edward Rutledge, Chairman, Dr. R. S. Cathcart and Dr. K. M. Lynch.

It was moved, seconded and carried that a member be elected to fill the unexpired term of Dr. Kollock as member of the Board of Censors. Dr. W. H. Prioleau was nominated and unanimously elected to fill this position.

At 9:00 P. M., the Scientific Program was called.

Dr. J. H. Cannon reported an interesting heart case.

Dr. J. F. Townsend exhibited an interesting case in which he had performed a plastic operation on the eye, following a burn.

Dr. F. B. Johnson read a short paper and gave a demonstration of the Aschheim-Zondek reaction for pregnancy. He exhibited the ovaries of a normal rabbit and those of a rabbit which showed a reaction to the introduction of the urine of a pregnant woman into the blood-stream of the rabbit. This reaction consisted of hemorrhagic spots on the ovaries.

The paper of the evening was read by Dr. D. L. Maguire, on Avertin Anesthesia. In this Dr. Maguire discussed the value of the new anesthetic and reported a series of cases in which this had been used. This was discussed by Dr. W. H. Prioleau.

There being no further business, the meeting adjourned.

W. Atmar Smith, M.D., Secretary.

SPARTANBURG COUNTY MEDICAL SOCIETY

The meeting was called to order by the Pres., Dr. Harry E. Heinitsch, Jr., August 31, 1931, and the minutes of the previous meeting were read and approved.

Dr. F. H. Sanders presented a convalescent patient with typhoid fever. Dr. Sanders stated that the Widal Test was rather uncertain and that a negative Widal would not mean that the patient did not have typhoid fever. A positive blood culture is the most reliable diagnostic test.

However, occasionally, it is impossible to obtain either a positive blood culture or a positive Widal. The blood count usually shows that the lymphocytosis are increased.

In the treatment of typhoid fever, Dr. Sanders recommends a saline enema daily and a diet containing a high amount of carbohydrate and a small amount of protein in order to avoid typhinitis. Lactos is also given to prevent the formation of gas. Carona vaccine given by mouth cuts down the duration of the disease 50 per cent.

The patient presented by Dr. Sanders showed normal temperature four weeks after the onset and within a short time the temperature went up and remained elevated for four weeks more. There was apparently re-infection. Rose spots were present for the second time. The patient also had severe abdominal pain for one week. The patient was observed carefully and escaped operation.

Dr. D. Herbert Smith stated that he had seen a colored girl with typhoid fever who had been given the vaccine three weeks before the onset of her illness. Dr. Smith wanted to know the length of time required for vaccine to protect the patient against typhoid fever. Dr. Busch stated that it required at least one month for immunity to develop following injection of typhoid vaccine. Dr. Alford stated that he had seen a patient who had clinical symptoms of typhoid fever but the blood count showed of leucocytosis. Dr. Alford wanted to know if a high leucocytic count was often found in typhoid fever.

Dr. Temple stated that the Widal test was not very reliable. He stated that the Widal was usually positive one month after injection of typhoid vaccine and that the vaccine offers protection in over 95 per cent of the cases. Dr. Temple stated that the Widal may be positive one day and negative the next. He also stated that the leucocytosis is occasionally present in typhoid fever, and is usually caused by some complication. He advised looking for some other cause for the leucocytosis unless there was a positive blood stool.

Dr. Jefferies stated that in his experience rose spots appear more frequently in those who live indoors.

Dr. Josey recommended using a small amount of blood and a considerable amount of agar in order to obtain a positive blood culture.

Dr. President read a letter from the Southeastern Life Ins. Co., advising that the number of physicians insured under the Spartanburg County Medical Society Group Policy had fallen below 25. The Southeastern Life Insurance Co., requested permission to revise the contract so that it would be operable with only 10 members in the group. The Society voted to accede to the

request. The Southeastern Life Ins. Co. also stated that in the future it would be necessary for the Treasurer of the Co. Medical Society to collect the Insurance premiums from members carrying this group insurance.

There being no further business the meeting adjourned.

H. E. Heinitsh, Jr., Pres.
W. M. Sheridan, Sec. Treas.

SPARTANBURG COUNTY MEDICAL SOCIETY MEETING

September 28, 1931

Dr. J. Warren White presented a patient who had recently received a gun shot wound of the leg. Several inches of the tibia and fibula were missing. Pins were placed in the tibia, above and below the fracture, and traction applied above and below. As soon as the fragments were in good alignment the entire leg was incased in Plaster Paris.

Rev. A. R. Fike presented a patient with enlargement of the upper end of the sternum. This patient had rapid heart action and a murmur of the carotid.

Dr. Roy P. Finney demonstrated X-Ray films showing metastatic cancer of the lungs, hydronephrosis, bilateral large renal calculi, ureteral stone, which migrated from the lower end of the ureter to the inferior calyx.

Dr. J. C. Josey gave a very interesting paper entitled—"Diagnosis and Treatment of Diabetic Coma." This paper was discussed by Dr. W. W. Boyd and Dr. F. H. Sanders.

Dr. C. W. Bailey nominated Dr. J. H. Cathcart and Dr. J. H. Sanders as members of the Spartanburg County Medical Society.

There being no further business the meeting adjourned.

H. E. Heinitsh, Jr., Pres.
W. M. Sheridan, Sec.—Treas.

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WANTED: Salaried Appointments for Class A Physician in all branches of the Medical Profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member The Chicago Association of Commerce.

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is one of the advertisements of The Sugar Institute

THE advertisement reproduced here is one of the series appearing in newspapers throughout the country. In order to keep the statements in accord with modern medical practice, they have been submitted to and approved by some of the leading authorities in the field of human nutrition in the United States. The Sugar Institute, 129 Front Street, New York.

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Try a dash of sugar to season pot-roasts, braised lamb and veal, stews and meat loaf. In boiling corned beef or ham, add a half cup of sugar, more or less, to the water. "A dash of sugar to a pinch of salt" is also a fine seasoning for many fresh or canned vegetables. Flavor and season with sugar. The Sugar Institute.

"Flavor and season with Sugar"

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The Journal

of the

South Carolina Medical Association

VOL. XXVII.

GREENVILLE, S. C., DECEMBER, 1931

NO. 12

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The liberal use of cow's milk in the child's diet is desirable for its calcium and phosphorus content when its well-known deficiencies in iron and vitamin B (F) are made good with Mead's Cereal which contains 100 times as much food iron as whole milk.

Constituent	Mead's Cereal	Rolled Oats	Farina	White Bread	Whole Milk	Eggs	
	%	%	%	%	%	%	
Moisture.....	7.0	8.0	10.90	35.30	87.00	73.70	These figures are included to illustrate ordinary nutritional values. These factors no longer constitute a serious nutritional problem.
Protein.....	15.00	15.2	11.0	9.2	3.3	13.4	
Fat.....	3.00	7.3	1.4	1.3	4.0	10.5	
Carbohydrate..	71.80	66.2	76.3	53.1	5.0	—	Mead's Cereal excels in minerals and vitamins. It is noteworthy that the calcium-phosphorus ratio of Mead's Cereal is 1.2:1, similar to that of average whole milk, which is considered the most favorable ratio for retention.
Calories per oz.	109	110	103	74	20	42	
Calcium.....	0.780	0.069	0.021	0.027	0.120	0.067	
Iron.....	0.024	0.0038	0.0008	0.0009	0.00024	0.003	
Phosphorus....	0.620	0.392	0.125	0.093	0.093	0.180	
Copper	0.0013	0.0005	0.00017	0.00034	0.000015	0.00023	

MEAD JOHNSON & CO., Evansville, Ind., U.S.A.

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THE SANATORIUM is a private institution with 150 beds, located in the Ginter park suburb on the Richmond-Washington National Automobile highway. Midway between the North and the distant South, the climate of this portion of Virginia is almost ideal. Nearby are many reminders of the Civil War, and many places of historic interest are within easy walking distance.

THE PLANT consists of fourteen separate buildings, most of which are new, located in the midst of a beautifully shaded 50-acre lawn, surrounded by a 120-acre tract of land. Remoteness from any neighbor assures absolute quietness.

THE LARGE number of detached buildings makes easy, satisfactory and congenial groupings of patients. Separate buildings are provided for men and women. Rooms may be had single or *en suite* with or without private bath. A few cottages are designed for individual patients.

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THE SCOPE of the work of the sanatorium is limited to the diagnosis and treatment of nervous and mental disorders, alcoholic and drug habituation. Every helpful facility is provided for these purposes, and the institution is well equipped to care for such patients. It affords an ideal place for rest and upbuilding under medical supervision. Five physicians reside at the sanatorium and devote their entire attention to the patients. A chartered training school for nurses is an important part of the institution in providing especially equipped nurses—both men and women—for the care of the patients.

SYSTEMATIZED out-of-door employment constitutes an important feature of the treatment. Wonderful work in the arts and crafts is carried on under a trained teacher. There are bowling, tennis, croquet, billiards and pool.

THE SANATORIUM maintains its own truck farm, dairy, and poultry yards.

Illustrated Booklet on Request

The Journal

OF THE

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Published Monthly Under Direction of the Board of Councilors.—Annual Subscription, \$3.00.

EDGAR A. HINES, M.D., F.A.C.P., Editor-in-Chief, Seneca, S. C.—EDGAR A. HINES, Jr., B.S., M.D., Rochester, Minnesota, Assistant to the Editor

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OBSTETRICS AND GYNECOLOGY

R. E. Seibels, M.D., Columbia, S. C.

UROLOGY

The S. C. Urological Society

ROENTGENOLOGY

T. A. Pitts, M.D., Columbia, S. C.
PATHOLOGY & BACTERIOLOGY
H. H. Plowden, M.D., Columbia, S. C.

SURGERY

Wm. H. Prioleau, M.D., Charleston, S. C.

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J. F. Townsend, M.D., F.A.C.S., Charleston, S. C.

DERMATOLOGY

J. Richard Allison, M.D., Columbia, S. C.

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W. T. Brockman, M.D., Greer, S. C.

NERVOUS & MENTAL DISEASES

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MEDICAL RESERVE CORPS

Col. J. E. Daniel, Med. Res. Greenville, S. C.

PUBLIC HEALTH

B. F. Wyman, M.D., Columbia, S. C.

EDITORIAL

ANNUAL CONFERENCE OF STATE SECRETARIES AT A. M. A. HEAD-QUARTERS, CHICAGO, NOVEMBER 13, 14, 1931

Both the Secretary Editor and his Assistant were present at the recent annual meeting of Secretaries and Editors of constituent State Associations. This organization is one of the most potent factors in the promotion of organized medicine in the world. When it is considered that organized medicine in this country now has a membership exceeding one hundred thousand the problems of the State Secretary and Editor are of extreme importance. The attendance this year was unusually good coming from practically every State in the Union. The following program was carried out. Dr. E. Starr Judd, President, and Dr. Edward H. Cary, President-elect of the A. M. A. gave inspiring talks; some of the other speakers and their subjects were as follows: Dr. Emma W. Pope of San Francisco, "Official Records"; Dr. C. B. Conklin of Washington, "Practice of Medicine by Lay Organizations"; Dr. J. H.

Dempster of Detroit, "Editorial Problems"; D. C. B. Wright, "Medical and Hospital Service for Veterans"; Dr. Rollin T. Woodyatt of Chicago, "The Hospital and Its Staff as a Practicing Group"; Dr. Alec N. Thompson of Brooklyn, "Coordinating the Work of Five County Societies"; Dr. A. H. Freiberg, of Cincinnati, "The Significance of Medical Leadership"; Dr. Nathan Sinai of Ann Arbor, "The Way of Medical Insurance."

It can be seen at a glance that such a program as this is of infinite helpfulness to the State Secretary.

THE ANNUAL MARLBORO MEETING

Few meetings anywhere in the South are so much looked forward to as that of the county medical society meetings at Bennettsville held each year about New Years. The Secretary, Dr. D. D. Strauss, has announced that the coming meeting will offer the same splendid attractions that have hitherto given the large number of doctors attending them unusual pleasure.

DR. R. S. CATHCART ELECTED PRESIDENT SOUTHERN SURGICAL ASSOCIATION

The elevation of Dr. Cathcart to the Presidency of the Southern Surgical Association is an honor of great distinction for this organization is one of the great scientific societies of the world. While the name Southern means much to us here in this section of the country yet the members of this Association, many of them at least, have acquired world wide fame. Dr. Cathcart has been honored by many other organizations in recent years notably with the Presidency of the South Carolina Medical Association. His administration in the latter office was marked by a keen interest in every detail of the Association's affairs. The membership increased in numbers, the Journal profited by his advice and as a presiding officer at the annual convention Dr. Cathcart was at his best. The great surgical association which he has now been placed at the head of will feel the effects of his executive ability and be stimulated along many lines.

PLANS FOR 1932 MEETING UNDER WAY

The Scientific Committee consisting of Drs. J. Heyward Gibbes, Chairman, Le Grand Guerry, William Weston of Columbia together with Dr. Marion Wyman, Chairman of the Committee on Arrangements and the President and Secretary of the State Association met recently and settled upon certain plans for the Columbia meeting of the State Association, April 19, 20, 21.

One of the most important features is the gratifying news that Dr. E. S. Judd of the Mayo Clinic, Rochester, Minnesota, President of the American Medical Association will be a guest of the Association. A great public health meeting is contemplated to which the general public will be invited on the night of April 20. Dr. Judd will be the chief speaker.

There will be a symposium on acute abdominal conditions. There will also be a series of papers on pellagra and there are other important plans not yet far enough along to be disclosed.

One of the most attractive features of any

meeting is that of the headquarters hotel which will at the same time combine satisfactory places for the scientific sessions and scientific and commercial exhibits. The new Columbia Hotel has been selected as the Headquarters Hotel. This magnificent hotel will have every facility for the care of the Convention.

SCIENTIFIC PROGRAM TO BE LIMITED. TITLES OF PAPERS SHOULD BE SENT TO THE SECRETARY

There will be room for ten or twelve volunteer papers on the program of the State Association. The number of papers will be limited to approximately 20 and about half of the number will be invited by the Scientific Committee. The volunteer titles should be sent to the Secretary early in the year.

THE WHITE HOUSE CONFERENCE FOLLOW UP MEETING IN COLUMBIA

One of the most enthusiastic child health meetings ever held in South Carolina was that of December 2, and 3, called at the instance of Governor Blackwood. Professor G. Croft Williams of the University of South Carolina was the general Chairman. Dr. James A. Hayne the State Health Officer was the toastmaster at the banquet and one of the leaders of the Convention. Numerous committees were appointed and rendered reports outlining a program to be carried out in the local communities throughout the State.

The medical profession was well represented at the meeting and it is expected that they will take an active part in promoting the cause in their several communities.

THE STATE HEALTH DEPARTMENT

The report of the State Health Officer, Dr. James A. Hayne to the Legislature indicates a lowering of mortality of several reportable diseases, diphtheria, dysentery, intestinal diseases, malaria, meningitis, of mothers during parturition and pregnancy, tuberculosis, and a slight decrease in typhoid fever. It is worthy of note that automobile accidents have decreased due, it

is thought, to the police patrol. There has been an unexpected decrease in deaths from pellagra as it is conceded that economic conditions when they are unfavorable increase the deaths from this disease. Infant mortality is slowly but surely being lowered in South Carolina. The total number of deaths in South Carolina from all causes is the lowest in some years. The numerous divisions of the State Board of Health of South Carolina have functioned admirably the past year.

The State Board of Health disburses something like a quarter of a million dollars annually. The report of the State Auditor of these funds commends the bookkeeping system and calls attention to the accurate accounting for all of the various funds handled by the State Health Department.

THE OLD YEAR AND THE NEW

The profession of medicine with centuries to its credit as an honored vocation really makes little change from one year to another yet we are inclined to some reaction annually as Christmas rolls around. So far as the State Medical Association is concerned it is almost in sight of the century mark and there is little change from one year to another. We must believe however that the majority of our members are better doctors when the year closes than they were at the beginning of the year and so it is with the State organization and the majority of the constituent societies. We have had good scientific programs and the attendance has been remarkable. There is not much room for growth in our membership now but a tremendous opportunity for scientific advancement. As a result of preventive medicine the morbidity and mortality of our State both show creditable declines. This could not have been brought about but for the unselfish devotion of the medical profession. The Jour-

nal has had a satisfactory year. The scientific papers published therein have never been surpassed since the Journal was founded. The Associate Editors have rendered a most valuable service. The Secretaries of the County and District Societies have been unusually prompt in sending in their reports for publication and now we wish to pay a tribute to our advertisers. The financial depression has had some effect on the advertising business in general but we have not as yet felt it seriously. It would be impossible to publish a State Journal without the patronage of ethical advertisers. We owe them therefore at this time of the year hearty greetings. We wish to express our appreciation to many other friends for their loyal support in making the Journal a creditable and representative scientific periodical.

As the Old Year goes out and the New Year comes in it is not too much to hope that we face still greater achievements.

CHARLESTON SOCIETY ONE HUNDRED AND FORTY-TWO YEARS OLD

Elsewhere in this issue we publish the proceedings of the annual meeting of the Medical Society of South Carolina (Charleston County). This is one of the oldest living Societies of the United States and has an honorable record surpassed by none. Its glorious history is a source of pride to every South Carolinian and its fame has long since spread beyond the confines of the State. It is not too much to expect that at an early date the records of this ancient medical society may be published in book form. The one hundred and fiftieth anniversary is not so far away now and that would be a good time to carry out this suggestion. It will take several years to compile a worthy volume commemorating the great service rendered by the medical profession of Charleston to the State and to the nation.

ORIGINAL ARTICLES

TUMORS OF THE DUODENUM, JEJUNUM AND ILEUM

*William L. A. Wellbrock, M.D., Section on
Surgical Pathology, The Mayo Clinic,
Rochester, Minnesota*

With increase in scientific knowledge and better medical education, earlier diagnoses are being made of pathologic conditions of the intestine. It is to tumors of the duodenum, jejunum and ileum that I wish to call attention.

REPORTS OF CASES

CASE 1. The chief complaint of a housewife, aged sixty-four years, was intermittent abdominal distress. She underwent resection of the sigmoid for diverticulitis in 1926, and gallstones were removed in July, 1930. For the few months before her admission at The Mayo Clinic a "lump" had appeared in the abdomen, the distress accompanying which was relieved by vomiting. She related that in the last few spells of vomiting she had expelled a great amount of material but that the vomiting had not been projectile or the material fecal or bloody. She had not been nauseated or constipated. On an average of every seven days, there was the sudden onset of a cramping sensation, as if something were present in the abdomen which refused to move up or down. She was well between attacks.

Exploration revealed a pedunculated tumor in the first portion of the jejunum. The upper portion of the small intestine was greatly dilated. The wall of the jejunum was hypertrophied both above and below the lesion. The tumor was attached by a pedicle, and the extent of its movement was 15 to 20 cm. The bowel was opened and a lipoma of the ileum, measuring 5.5 by 2.5 cm. was removed. Convalescence was uneventful.

CASE 2. A woman school teacher, aged forty-nine years, registered at The Mayo Clinic September 24, 1931. Her chief com-

plaint was of stomach trouble. Her mother had died of carcinoma of the liver. The patient had gallstone colic in 1922; otherwise she had been well until February, 1931, when abdominal pain and vomiting suddenly developed. The attack lasted one day. She was then well until she had a similar attack six weeks later. After June she had abdominal discomfort almost constantly, with "gas" on the stomach shortly after meals. There was pain in the left upper abdominal quadrant, associated with nausea which was relieved somewhat by vomiting. The vomiting eventually became of the retention type. She had lost about 35 pounds in weight, and had experienced increasing weakness for the four months previous to her admission to the clinic. She had some constipation, no jaundice, no hematemesis, and no blood in the stools.

Her thorax, liver, spleen, pelvis, rectum, and genito-urinary system seemed to be normal. She was well developed, and, in spite of the loss in weight, was well nourished. The Wassermann test of the blood gave negative results. Analysis of gastric content gave the following results: total acidity 20 (end point in 10 c. c. of gastric content produced by 2 c. c. of tenth normal sodium hydroxide); no free hydrochloric acid; total quantity of gastric content obtained, 460 c. c.; no blood; no remnants of food. Roentgenologic examination confirmed the impression that the thorax was normal; the stomach was normal; there was an obstructive lesion in the lower portion of the jejunum.

Exploration was made through a right rectus incision. Gallstones were found. Also, there were several large dilated loops of small intestine below which was a small tumor having the appearance of a Murphy button. The liver was normal. About 20 cm. of small intestine was resected with a tumor in the middle of the segment. Examination of the specimen in the pathologic laboratory resulted in the diagnosis of annular adenocarcinoma of the jejunum, 2.5 cm. in diameter, and of malignancy graded 2. Convalescence was uneventful.

COMMENT

A large number of intestinal tumors is not diagnosed until they are large enough to be palpable or to produce almost complete obstruction. Most of them, even those which are malignant, because they usually are low grade, if recognized when they are small, can be resected, and complete cure results in many cases.

Malignant primary tumors of the duodenum are extremely rare. Many which are called carcinomas of the duodenum are not true duodenal carcinomas. They may be carcinomas of the pylorus extending into the duodenum, or they may have arisen from an accessory pancreatic nodule, or from one of the ducts leading into the duodenum. Direct metastasis to the duodenum and small intestine is also extremely rare, but implants on the serosa are fairly common, and may extend into the wall, thus giving the gross signs and symptoms of tumors of the small bowel. It is also necessary to remember that tumors of the small bowel may be multiple.

Tumors of the duodenum, jejunum and ileum may be classified as in the table.

The polyps which occur most frequently in the jejunum and ileum vary in diameter from a few millimeters to several centimeters; the latter may be large enough to produce intussusception. These are adenomatous and are sessile or pedunculated. The long pedunculated type tends to cause partial, intermittent, or complete and permanent intussusception. These polyps may give rise to pedunculated and ulcerated papillary adenocarcinomas. Polyps are frequently multiple; hence the possibility and probability of multiple carcinomas. Adenomas are more often accessory growths, usually are only a few millimeters in diameter, and rarely, if ever, produce clinical symptoms. They may give rise to adenocarcinomas. Myomas and fibromas are usually very small tumors lying in the muscular wall and most often are found accidentally. Lipomas are occasionally found. They are small, smooth, round, movable, yellow tumors varying in diameter from a few millimeters to several centimeters. They lie just beneath the mucosa and may simulate a polyp. Angiomas, hemangiomas, and lympho-endotheliomas occur as small, flat, irregular, undefined, or rounded, soft, pliable

tumors. They may become malignant. All of these tumors, if large enough, produce mucosal ulceration.

The carcinomas are usually of a moderate degree of malignancy and are slow to metastasize. They are commonly of the napkin-ring or annular type, producing varying degrees of obstruction. Polypoid growths are sometimes found, and cause obstruction. The more malignant tumors are usually smaller, more friable and really produce less obstruction than the less malignant growths. Some of the adenocarcinomas are typically colloid in type, similar to those seen in the large intestine. They are of a glassy, mucinous appearance, and histologically are made up of acini lined by goblet shaped and crescentic cells. The acini are filled with a mucinous or colloid material.

The carcinomas which are usually called carcinoid tumors are also frequently found in the tip of the appendix. They are often multiple, are of a low grade of malignancy, and seldom metastasize. They are small, rounded, fairly firm, and lemon-colored, lying beneath the mucosa. They arise from the basal epithelial cells of the mucosal epithelium and are similar to the basal cell epitheliomas. They may dedifferentiate into the usual type of adenocarcinoma. Microscopically, these tumors consist of nests, groups, cords, and acini. The nuclei are round or ovoid, and contain one or more small nucleoli. The cells of the tumor lie in a fibro-endothelial stroma.

Sarcomas are less frequently found than carcinomas. Many tumors which are called sarcomas are really highly malignant undifferentiated carcinomas. The fibrosarcomas, myosarcomas, liposarcomas and angiosarcomas arise from their benign forebears and are usually clinically not identified unless, on exploration, invasion and extension have occurred into neighboring and surrounding tissues. Lymphosarcomas are soft, rounded, friable tumors lying in the submucosa and arising from lymph follicles. These tumors may occur locally or as a part of a generalized condition of lymphoid neoplasia such as might occur in Hodgkin's disease or in leukemia.

Tumors of the duodenum, ileum, and jejunum are infrequent, but they occur sufficiently often to warrant earlier recognition and surgi-

to stimulate uterine contractions in fifteen cases.

Schmidt reports his experiences with the drug in one hundred cases and states that 26 per cent of these showed varying degrees of restlessness. In other respects his experience confirmed that of his German colleagues.

Hartung, who has had an extensive experience with pernocton as a basal and adjuvant anesthetic in general surgery warns against the combined use of morphine and pernocton because of the danger of respiratory paralysis.

The report under review is based on the use of pernocton in 133 obstetrical cases and 20 gynecological cases. No further allusion will be made to its use as an adjuvant anesthetic in gynecology.

100 and 20 of the obstetrical cases were primiparas and thirteen were multiparas. The drug was administered intravenously, with 4.4 c.cs. as the usual initial dose. When repeated, 2.2 c.cs. were usually given, but occasionally 4.4 c.cs. were administered. A repeat dose was given twelve times. Labor was allowed to become well established with strong uterine contractions at intervals of three to five minutes before the injection was given. Forty-seven patients were treated early in the first stage of labor before dilatation exceeded three fingers. Fifty-six patients were treated later in the first stage of labor and thirty-three did not receive the injection until the second stage became established. The injections were given between pains and never faster than 1 c.c. per minute. They report that a rapid administration of the drug is likely to be followed by a sudden drop in blood pressure and marked excitation. The patients usually entered a deep sleep before the injection was completed. Following this there was occasionally moaning during uterine contraction with a return to complete unconsciousness between the pains. The duration of this was found to be variable and lasted from 30 minutes to four or five hours. After the analgesia began to lessen the patients would cry out during the pain, but were unable to remember it later. There was little effect on respiration, pulse or blood pressure. Uterine contractions occasionally were slowed, and lessened in intensity and in three cases labor was interrupted for 20 to 30 minutes. In the ma-

jority, uterine contractions were either unaffected or definitely increased in frequency and duration. This latter was more noticeable when the drug was given in the second stage of labor. The authors state that the only undesirable effect was restlessness, and six of their cases showed great motor excitability, rolling and tossing about in bed and crying out with the pains. Three of these cases required restraint. Eighteen women were moderately restless, but experienced varying periods of amnesia and after labor they stated that the drug had given them relief.

In 46 cases, that is, slightly more than one-third, the results were recorded as very favorable, these patients being apparently relieved after injection and having complete amnesia for the events of labor and delivery. In 72 cases, that is, slightly more than one-half the series, the effect was moderately favorable. These patients experienced some pain when the effects of pernocton wore off, and they had only partial amnesia. In three cases, that is, 2.25 per cent there was absolutely no relief. Labor was not slowed, apparently, except temporarily and seemingly was hastened in many instances, so that the average duration of labor was eighteen hours. The average duration of labor after the initial injection was about three hours. There was apparently no increase in the number of operative deliveries. The majority of cases required supplementary anesthesia, either nitrous oxide or ether, during the actual delivery.

In the series there was one maternal death. The cause of this death was not determined, even at autopsy. The authors think that it was not due to pernocton. Whether or not they are correct in this cannot be determined. The death was an acute catastrophe occurring in what was thought to be a perfectly normal woman. Ten babies were slow to breathe and required some artificial stimulation.

The authors in their summary state, "We believe the use of pernocton in labor is a distinct advance in obstetric analgesia. The relief of pain and the accompanying amnesia are the most notable of the effects. The fact that there is no tendency to prolong labor is important. In this connection it has a distinct advantage over rectal analgesia and morphine.

The occasional tendency to produce excitation is apparently the only unhappy finding. . . . We believe it to be, in ordinary doses, without danger to the mother."

Comment: Although this report is not termed a preliminary one by its authors it is my opinion that it must be so considered. It is my opinion further that it was very unfortunate that this method was broadcast to the general public with so much praise, so that anxious women were led to believe that a true panacea for the pains of childbirth had been found, and one which is simple enough to be used by their own physicians. The series of cases is rather small upon which to base any positive conclusions. This seems particularly so when it is remembered that there was one unexplained maternal death which may have been caused by the drug and which the authors admit was contributed to by the drug. Any method that will or may cause a maternal death rate of almost 1 per cent is dangerous to use.

Furthermore, it would appear that the results in pain relief were far from what might be desired. In slightly over one-third of the cases the result is termed favorable. However, in slightly more than one-half the cases the result is termed moderately favorable, and this is explained to mean that there was only partial amnesia and an early return of some pain. This would leave 11 per cent of the cases in which the result could not be classified as even moderately favorable. A further objection to the method is the fact that it is administered fairly late in the first stage of labor, and since there is some danger attendant upon using it along with or soon after morphine it would appear that there is little to be done for the woman before it becomes advisable to administer the pernocton, this in spite of the fact that many women begin suffering rather early in their labors. Furthermore, the method requires supplementary anesthesia near the end of labor in most cases. Eighteen per cent of the cases showed sufficient restlessness to require mention of the fact and in a number of the cases this was so extreme that restraint was required, this demonstrating a rather serious defect in the method, especially for use in the home.

I am afraid that the authors have not made

out a case for their method sufficient to warrant their statement that it has a distinct advantage over rectal analgesia and morphine, in that it lacks a tendency to prolong labor, and I doubt if they will receive widespread concurrence in their statement that the occasional tendency to produce excitation is the only unhappy finding. From a moderately extensive experience with Gwathmey's method of synergistic analgesia and from a close study of the reports of the experience of others with this method I am far from convinced that pernocton offers any advantage over it. Certain it is that the older and more carefully worked out method should not be dropped too suddenly in order to take up the new, nor should one's patients be led to expect too much of the new.

LOBAR PNEUMONIA: SALT-ALKALI TREATMENT WITH ALLUSION TO USE OF CO₂ GAS*

W. T. Lander, M.D., Williamston, S. C.

Twice already you have been so gracious as to listen to a discussion of Lobar Pneumonia, the central idea of which was the conviction that during this disease the kidneys hold up the excretion of salt because the system needs the salt in the fight against the disease. Salt we consider perhaps a specific for the disease, and alkalinity a help. Of salt enough (usually 2 to 4 drams a day) should be given in rather frequent doses to produce and maintain proper chloride reaction in the urine, the urine being diluted when necessary to normal Sp.gr. before testing. For alkalinity perhaps nothing is better than Sodium citrate or acetate, twenty grains every 2 to 4 hours, as needed. Since the alkali effect is evanescent, a dose or two should be given during the night also. Of course there remains the usual call to see after the patient's comfort and strength and elimination. For his comfort, mustard plasters, wet packs, sometimes morphine or equivalent; for his strength, plenty of nourishing food, its digestion insured if necessary by Caroid or other help; for his elimination, the liver (the great eliminator of poison) kept active by suitable cholagogue measures as needed; the bowels cleared early

*Read before the Anderson County Medical Society, Nov. 11, 1931, Anderson, S. C.

in the case by Castor Oil (no substitute), in case of a pronounced Indican reaction.

As to a few drugs: Digitalis is seldom needed and usually decreases the appetite. Whiskey, except in those addicted to its use, is usually detrimental. Atropin may deserve consideration. REST OF MIND AND BODY IS THE SUBSTITUTE FOR STIMULANTS. A case report by way of postscript will consider the Digitalis Treatment.

The primary object of this paper is to give a summary of the first fifty cases subjected to the Salt-Alkali Treatment. These were not "selected," they were taken as they came. The following were not satisfactory: A negro man of 39 years required attention for six weeks, resolution taking place very slowly. I could not explain. The temperature came to normal on the fourth day of treatment. Three died: First, a negro girl of 15 years who had had a neglected Grippe for 12 days. Second, a white man of 45 during 5 days had been treated for Grippe by heart-depressing analgesics. Third, a negro baby of 20 months on the second day broke out with Measles: Note: The infancy and the general rales suggest that this was likely not Lobar—but Broncho Pneumonia, in which the salt behavior is different.

P. S. The Digitalis Treatment is applicable early in the case only, when the heart is still very strong. The plan deserves a certain measure of respect. The idea is to give such strength to the blood stream that it may force its way through the damaged portion of lung and overcome the congestion. For this end

massive doses are called for, sufficient to produce digitalization in 24 to 36 hours. The practice of giving 15 or 20 drops at 4 hour intervals may support the heart somewhat, will more surely alienate our best friend the stomach, and will never have the right to claim cure. Can we embody the saving idea of the Digitalis Method in something else, which has no deleterious by-effect? Let us consider a case in point, one out of a good many. Mrs. N. 58 years old, all her life a drudge either on a mountain farm or in a mill town, had had Pneumonia four times already, and several times had taken her bed with decompensated heart attacks. Her fifth Pneumonia began with a chill and nausea at an early hour. In the evening two right lobes gave rales, a little cough produced rusty sputum, temperature 102, respiration 30-labored. About two per cent CO² was inhaled. In 15 minutes she declared she breathed without labor. Four thirty minute treatments 12 hours apart permanently removed the obstruction. She had no pleurisy, but complained of a very painful throat. Examination revealed a dirty diphtheria looking membrane. Study of this and of the sputum showed an infection almost wholly of pneumococcus.

In only a dozen cases has opportunity been afforded to try the efficacy of CO² inhalations for bronchial obstruction or congestions. These inhalations have been very effective not only in early Lobar Pneumonia, but also in Broncho Pneumonia, chronic Bronchitis with exacerbation, Tuberculosis. Permit us to bespeak for the CO² inhalations an open-minded trial.

THE 300,000th LEITZ MICROSCOPE

The Optical Works of E. Leitz, in Wetzlar, Germany, have completed their 300,000th microscope. This instrument was presented at an appropriate gathering to Geheimrat Professor Dr. Ludwig Aschoff, of Freiburg, in Breisgau, Germany, a scientist and physician of world renown in the pathological and anatomical field of scientific endeavor.

The dedication of this microscope follows a custom of the firm of E. Leitz to present every 50,000th microscope to an outstanding scientist or institute, thus expressing their appreciation of the cooperation extended by leading authorities to the Leitz Works.

The 100,000th microscope was presented to Dr. Robert Koch, of Berlin, and the 150,000th to Dr. Paul Ehrlich, of Frankfurt.

GASTRO-ENTEROLOGY AND PROCTOLOGY

By W. T. Brockman, M.D., Greer, S. C.

*PERI-RECTAL ABSCESS: PREVENTION AND CURE

Cooke says: It is probably not an exaggeration to say that abscess or fistula represent about one third of all cases of rectal diseases seen by the Proctologist. Minor says: Abscess formation is due to the resistance met by infection in an effort to force its way to the periphery. Localized inflammation of the peri-rectal tissues is practically always the result of infection, and usually terminates in suppuration. Cooke says: Much of the interest and more of the importance of peri-rectal abscess consists in the fact that it so often results in the formation of fistula. When we recall the relatively high proportion of fistula cases met with clinically, and reflect that their occurrence in the vast majority of instances is due to neglect or mismanagement of the primary lesions, neither the interest nor the importance of the subject requires further emphasis.

Hirschman says: The region of the anus and rectum is peculiarly prone to infection and abscess formation, for several reasons; The usual amount of cellular tissues surrounding the rectum; the lavish blood supply of this region; the constant presence in the rectum of pyogenic bacteria; the traumatism from unusually large or hard feces; foreign bodies such as spicules of bone, fruit pits, seed and other articles which have been ingested. The rich lymphatic supply of this region is of great importance in the production and extension of septic inflammation. Skin diseases around the anus particularly those which effect the hair follicles, inflammation of external hemorrhoids, the irritation from clothing or harsh detergents, disease of the crypts of Morgagni, rectal ulceration and anal fissure—all may form the starting point for the formation of an abscess in this region.

Rectal abscess is not the most common acute

infection encountered over a period of months or years in treating rectal diseases, but of recent months its incidence is decidedly on the increase in patients presenting themselves for examination at the clinic. The acute painful rectal infections in numerical order as we see them would be infected anal crypts, anal ulceration, strangulated protruding hemorrhoids, fistulae and rectal abscess. It has become a well established belief with us that in the majority of patients presenting either of the above rectal infections, the cause of the condition can very often be traced directly to an advanced oral sepsis. The exceptions to this rule are those who have recently suffered an attack of influenza, acute sinusitis or pneumonia.

Over a period of more than two years we have attempted to study the etiology of rectal and colon diseases from a laboratory stand point. Among either laboratory tests we have made, the gum smears and cultures have by far the more convincing evidence as to a cause. The prevalence of Vincents organism the spirillum and fusiform bacilli in quite a large percent of patients gums and mouth mucosa have impressed us as having a direct bearing on the illness of the patient. The blood picture is often that of anemia. The gastric analysis reveals a deficiency of Free H. C. L. in a very large percentage of these patients.

During the past few months we have seen two patients that suffered several hemorrhages over a period of a few days time. We satisfied ourselves that the bleeding had not occurred from the rectum or lower sigmoid. An x-ray series failed to demonstrate an ulcer of the stomach or duodenum. Both of these patients had a foul mouth, markedly oral sepsis with a mixed infection.

It is interesting to speculate from what part of the alimentary tract did the bleeding occur, and did it occur because of having swallowed over a period of days, weeks and months these infective organisms. Is a deficiency of Free

*Read before the Fourth District Medical Association, Anderson, S. C., Sept. 8, 1931.

H. C. L. in the stomach a sequel of infection having come down from above thus allowing these germs to trespass on into the gall bladder and appendix and finally to find a fertile field in the colon and rectum producing among other diseases that of rectal abscess.

PATHOLOGY

To me the pathology is very clear. In the lower end of the rectum is mucosa. Throughout the anal canal is squamous epithelium. Just above the junction of the two types of lining i. e. in the lower rectum are the so called anal pockets. It is not difficult to see how infection takes place. First, there is injury to a pocket, followed by infection, which extends through the lining and from either a sub-mucocutaneous or subcutaneous abscess or the infection goes farther and passes outward between the sphincter muscles. Thus an abscess is formed outside the wall.

TREATMENT

The majority of patients suffering from rectal abscess present an emergency situation, something must be done at once. The temptation to use the lance is the most natural thing to do. I wish to call to your attention a better method. Dr. Fansler calls it "the scalping operation." For several years I have followed his technique with most gratifying results. He says: It is agreed (1) That a substantial percentage of these cases have a connection with the bowel, and so are really complete fistulae from the moment the abscess is opened.

(2) That whether there is a bowel opening or not the best treatment is early and radical incision, and that the external wound must be kept wide open, while the cavity is granulated in from the bottom outwards. When this dictum is followed a cure will result in all cases where there is no internal opening, and can be secured in some cases where one is present. In my opinion the chief cause of failure, in these cases is an inability to keep the skin incision wide open, so that the depth of the cavity can be properly medicated. That this difficulty is real is shown by the fact that the simple straight incision has practically been discarded for the T or cross incision.

In my hands even these have been only par-

tial satisfactory. Though a very radical incision be made at the time of operation when the swelling due to the abscess subsides, the wound has also shrunk and the edges quickly contract down and heal together. This is especially true if the patient is a little careless in coming in for dressings, or if the deeper part of the wound is slower than usual in granulating. The result is a deep cavity or sinus with a small external opening which renders healing difficult or impossible.

With these facts and experience in mind, it occurred to Dr. Fansler that a more radical procedure, including actual removal of a portion of the skin overlying the abscess, would be an improvement in so far as the two rapid closing of the skin opening was concerned. This procedure, he terms "scalping the abscess." This procedure is as follows: A liberal cross incision is made as near the anus as possible, and the extent of the abscess cavity explored with the finger and probe.

This having been done, the four segments of skin, made by the incision, are removed giving an approximately circular opening. The size of the opening depends upon the size of the abscess cavity, the general principle being to have the circle of skin removed slightly larger than the greatest diameter of the abscess. This however is subject to any variation judgment may dictate.

We now have a cavity which has the approximate shape of a truncated cone, the base being outward. This shaped cavity is easily dressed and cleansed and, what is more important, medication may be accurately applied to the depth of the wound. When this can be done, the use of nitric acid or 40 per cent silver nitrate will frequently heal a small opening into the bowel, and the case terminated successfully as thoroughly: a simple abscess was present.

Report of four very recent cases of perianal infection, showing the probable source of infection.

Case No. 1. Mr. F. Age 30 yrs. came complaining of very painful rectal condition with anal discharge of pus and blood. Had influenza Feb. 1931 following which he developed a painful rectal condition and finally rectal abscess which was opened three times.

On examination he was found to have an extensive fistula in right ano-rectal region. Fistulectomy performed and recovery was uneventful.

Case No. 2. Mr. E. C. Age 18 yrs. came complaining of severe pain in ano-rectal area with general malaise and fever. Onset one week previous and slight blow in this region. History included influenza March 1931. The rectal condition proved to be that of peri-rectal abscess of the horseshoe type with severe cryptitis as the probable avenue of entrance. Fansler's method of scalping the abscess was used and healing was complete. Later further surgery in the anal canal will be necessary to keep the patient well.

Case No. 3. Mr. J. H. Age 38 yrs. Very sensitive painful rectal condition the onset of which was very sudden and continued uninterrupted. Past history negative except for severe pyorrhea. This proved to be Vincents infection. On examination he was found to have a large peri-rectal abscess on right side with painful sensitive rectum. Fansler's scalping method was again employed and recovery was uneventful.

Case No. 4. Mr. J. E. Age 29 yrs. Came suffering from severe rectal pain of one weeks duration. This was preceded by several months of rectal bleeding at stool. Past history included no serious illnesses. Has had

pyorrhea for a long period. On culture this was found to be a Vincents infection. On examination this patient was found with a large anal ulceration posteriorly under which was found a large abscess pocket. Fansler's scalping operation was performed and the patient made an uneventful recovery.

SUMMARY

1. The incidence of rectal abscess seems to be on the increase.

2. The etiology is practically always some infection in a remote part of the body and very often an oral sepsis of long standing. Vincents infection.

3. The peri-rectal tissue is of the type particularly susceptible to infection once an opening is gained.

4. Infected crypts are the most frequent avenue for the entrance of the infection.

5. Removal of the source of infection and adequate operative measures are necessary for the cure of the abscesses. Mere incision and drainage will only insure further abscess and fistulae formation.

6. The overlying skin must be removed in excess to the broadest part of the abscess.

7. Proper after care, keeping the incision cleansed and excessive granulations down by chemical cauterization, and using light dressing without packing the wound, are of great importance in the treatment.

STUDIES OF DISEASES OF LYMPHOID AND MYELOID TISSUES: VI. TREATMENT OF MALIGNANT NEUTROPENIA WITH PENTOSE NUCLEOTIDES

The nucleotide used by Henry Jackson, Jr., Fredric Parker, Jr., James F. Rinehart and F. M. L. Taylor, Boston (Journal A. M. A., Nov. 14, 1931), is prepared by the usual method of alkaline hydrolysis at room temperature, according to the technic of Jones and Perkins. The solution, after hydrolysis is complete, is made acid with acetic acid and the crude nucleotide precipitated as the lead salt, which in turn is decomposed with hydrogen sulphide and the filtrate containing the purified nucleotide is evaporated under diminished pressure, at a maximum temperature of 50 C. to a small volume and neutralized with sodium hydroxide. From the resulting concentrated solution, sodium nucleotide is removed by absolute alcohol

and dissolved in distilled water, and sufficient trichresol is added to make a 0.3 per cent solution. After it has stood in an icebox for two weeks the ph is adjusted to 7.0 and the solution is run thru a Berkefeld filter directly into small, sterile ampules. This preparation has been designated as "Neucleotide K 96." Twenty patients with malignant neutropenia of varied etiology were treated with intramuscular and intravenous injections of this preparation. In fourteen of these twenty cases, recovery took place. Clinical and hematologic improvement occurred quite consistently about five days after treatment was begun. The authors believe that these nucleotides may have a definitely favorable effect on an inactive bone marrow in certain cases of malignant neutropenia and that the substance is worth further trial in such cases. The material is apparently of no benefit in leukemia or sepsis without neutropenia and leukopenia.

S U R G E R Y

Wm. H. Prioleau, M.D., Charleston, S. C.

"PATHOLOGY OF CONGENITAL TORTICOLLIS"

There has been a great deal of confusion as to the etiology and pathology of congenital torticollis. Several theories have been put forward, but none has been entirely satisfactory. It seems now that the question has been answered in great part by correlating careful clinical observation and very convincing experimental work on dogs. The subject is treated in detail and well presented by Dr. Stewart Middleton of Edinburgh in the *British Journal of Surgery*, Volume 18, page 188.

Sternomastoid tumor of infancy appears from one to two weeks after birth; it disappears at about the third month. Sometimes torticollis appears while the tumor is present, however it generally is noticed about the age of 4 years when the child is growing rapidly.

Microscopical examination of sternomastoid tumor shows it to be composed of young and cellular fibrous tissue with remnants of muscle cells, whereas a section of sternomastoid muscle from a case of torticollis consists of large bundles of adult noncellular fibrous tissue with some well developed muscle fibers. The evidence is convincing that torticollis represents the end result of sternomastoid tumor.

In dogs the sartorius muscle was carefully

dissected free and the veins were ligated. After 7-10 days the muscle becomes hard and cartilaginous very similar to a sternomastoid tumor. Microscopical appearances of the two conditions are almost identical through out the course. From this experiment it seems evident that sternomastoid tumor is the result of venous obstruction.

As to the actual mechanism of the production of the venous obstruction, very little can be definitely stated. However there is some experimental work to show that the blood supply of the sternomastoid muscle may be temporarily obstructed with the head in a position of extreme rotation as occurs during labor. It must be further assumed that the temporary obstruction is venous, and that it is followed by a patchy thrombosis of the smaller veins. One would expect that this condition would occur more frequently in difficult labours. This is borne out in the authors cases in which there is a high percentage of firstborns and complicated labours.

The author concludes that congenital torticollis is the result of fibrosis of a sternomastoid tumor. The etiological factor is a temporary venous obstruction followed by patchy intravascular clotting. This condition is more common in difficult labours.

THE A. M. A. CHEMICAL LABORATORY— TWENTY-FIVE YEARS

In 1906 the Board of Trustees directed the creation of a chemical laboratory in the headquarters of the American Medical Association. The chief function of the Laboratory was and is to aid the Council on Pharmacy and Chemistry in its consideration of proprietary products. In 1906 deceit was rampant; false formulas and improbable chemical statements were not uncommon. The Laboratory provided physicians with accurate scientific information. Today there is much less of such gross deception; the work of the Laboratory is devoted largely to the purely constructive work of standardizing or examining new remedies, most of them of complex composition. Shortly after its creation, the Laboratory broadened its activi-

ties to include examination of nostrums. The results have been published in the columns of *The Journal* first known as "Propaganda for Reform" but more recently as "Bureau of Investigation." Each year a limited number of original investigations are undertaken on topics which may aid in improving materia medica. At its inception the Chemical Laboratory employed only one chemist and an assistant—today it has four chemists, including the director (all Ph.D.'s), and an assistant, besides adequate secretarial and stenographic help. The congratulations of the medical profession are here tendered the Chemical Laboratory, which for a quarter of a century has served both physicians and the public for the advancement of medical science and the public health.—*Jour. A. M. A.*, Nov. 14, 1931.

PUBLIC HEALTH

By B. F. WYMAN, M. D., Director of County Health Work, Columbia, S. C.

PART II

Committee Public Health State Med. Assn.

Mental growth includes much more than mere increase in intelligence as measured by our familiar tests. It begins even before birth, although its expression in the early months may be confined to the simplest sort of motor responses. Nevertheless, we can trace the development of patterns of behavior in these early stages. Following exactly the same logic as in the construction of intelligence tests, we are now well on the way to the establishment of normal standards for early mental growth. In all of our thinking about the growth of the mind, we must not confine our attention too closely to intellectual abilities, but must acquire a broad concept of the development stages through which the individual passes, and include the emotional development of the child, a field as yet almost untouched.

Even the repeated physical examination has its limitations. The previous history of the individual is also important, and in order to arrive at anything like a complete picture, we must estimate as accurately as possible the hereditary possibilities with which the child is endowed. His mental, as well as his physical status, must be evaluated, and we must also consider the influence of the social and economic conditions which surround him. Our problem is to appraise the individual as a whole, so that we may assist him to achieve to the greatest possible extent his inborn potentialities.

Eradication and prevention of disease are an important aspect to promoting the best development of children. Next to this, we must devise means for early recognition, and prompt and adequate treatment of diseases, once they appear. What we are just beginning to appreciate is the value and importance of building up and maintaining the general health of the child in the prevention of disease. Here again our efforts to establish sound health habits and to foster adequate nutrition and op-

portunities of growth are doubly rewarded; they form the bulwark against disease, and at the same time constitute an end in themselves.

The part played by body mechanics, or "posture" as it is generally termed in the health and well-being of the child, is another subject receiving more and more attention. Like many new ideas, it became popular in an unfortunate manner, and much of this so-called posture work being done in the schools and elsewhere is nothing more than simple calisthenics or gymnastics. While the majority of medical schools give instruction on this subject, it is usually scanty or incidental and very inadequate. Yet body mechanics has a part to play in the child health program, and lack of training facilities for those who must do a large part of the educational work in this field is a serious matter. Definite information on the prevalence of bad body mechanics, its recognition as a causal factor in disturbances of health, and the methods of satisfactory treatment are needed.

A careful study of all available reliable data indicates that about 95 per cent of children suffer from dental caries. In the past, efforts to control caries have consisted in replacing carious areas by fillings, and oral hygienic measures. While these procedures have an undoubted effect upon general health and comfort, they seem to have failed, to a great degree, in preventing the development of caries. In an attempt to arrest and to prevent caries, research on animals, and, in some instances, carefully controlled dietetic measures among children have been carried out with notable results. An extension of reparative and hygienic measures is needed, but further study of the underlying causes is of great importance. Laboratory and clinical experience indicate that these causes lie within the field of mineral metabolism which may be regulated by dietetic control. In dental education, too little attention seems to be paid to this subject.

Practically all medical schools emphasize the

importance of health examinations of children, vaccination against smallpox, and immunization against diphtheria in their teaching. Information received from nearly 2,000 physicians who limit their practice to, or who are especially interested in children, as to their practice in giving health examinations to children under their care indicates that the more recently the physicians had graduated the more he made a routine practice of giving these examinations. A very large proportion made a practice of examining children under one year, older children less frequently, and when the school age was reached, but rarely.

Two procedures which are today generally admitted as preventive measures of proven value are vaccination against small pox and immunization against diphtheria. In the early part of the nineteenth century smallpox committed its chief ravages upon children about two years of age. One-fifth of all children born died of smallpox before they were ten

years old, and one-third of all the deaths of children were due to smallpox. In the death registration area of the United States in 1910, 62 per cent of all deaths occurred in children under five years. Diphtheria and small pox are absolutely controllable, and yet localized epidemics of smallpox keep occurring in this country. During the ten-year period, 1919-1928, 553,559 cases of smallpox were reported in continental United States. In 1927, 57 per cent of all diphtheria deaths occurred in children under five.

Although immunization against diphtheria has long since ceased to be a matter of experiment, diphtheria still takes its toll of lives of children every year. The age at which immunization is carried out is important. While deaths during the first year of life are comparatively few, 600 were reported in the birth registration area in 1928, and those deaths were mostly unnecessary.

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, WHICH WAS HELD AT POPER HOSPITAL, TUESDAY EVENING, NOVEMBER 10th, 1931, at 8:30 O'CLOCK

The meeting was called to order by the President, Dr. J. Sumter Rhame.

Present: Doctors: A. E. Baker; A. E. Baker, Jr., B. R. Baker; Ball; Beach; Beckman; Bowers; Buist; Burn; Cain; Cannon; Chamberlain; Jackson; W. H. Johnson; Lynch; McInnes; Maguire; O'Driscoll; Pearlstine; F. R. Price; Prioleau; Rhame; W. M. Rhett; W. P. Rhett; Richards; Rutledge; J. E. Smith; W. A. Smith; W. H. Speissegger; Taft; J. F. Townsend; Waring; Whaley; R. Wilson; Jenkins; Rudisill; Peoples; Culbreath; Townsend. (39).

Guests: Dr. C. L. Blew, of the U. S. Navy; Dr. W. A. Brown and Dr. Bowen, of Walterboro; internes and senior medical students.

The minutes of the meeting of October 27th were read and confirmed.

In the absence of the Chairman of the Program Committee, the Secretary requested suggestions from the members as to the program for the annual meeting. It was moved, seconded and carried that the arrangements for the annual meeting be left entirely to the Program Committee.

Dr. Paul H. Culbreath was present and signed the constitution.

The Scientific Program was called at 9:00 P. M.

Under Case Reports, Dr. J. A. Ball presented and demonstrated two cases of lichenplanus. The first was a well-marked acute case, the second he exhibited in order to show the result of treatment. The treatment emphasized by Dr. Ball was the use of mercury and arsenic, and exposure to the x-ray. This was discussed by Doctors Taft, Cannon and McInnes, Dr. Ball closing.

Dr. A. E. Baker, Jr. reported and exhibited three cases of pyloric stenosis which were cured by gastro-jejunostomy. The causes in each case varied, but they were all relieved by the same type of operation. This was discussed by Doctors Maguire, Prioleau, Taft, McInnes, E. H. Price, Dr. A. E. Baker, Jr. closing.

Dr. Hillyer Rudisill gave an illuminating discussion of "Fractures of the Elbow Joint" and exhibited x-ray pictures, presenting the various types of fractures. This was discussed by Dr. O'Driscoll.

Dr. R. B. Taft read a very able paper on "Concerning the Visibility of the X-Ray." He exhibited lantern slides illustrating the methods employed in this experienced study. This was discussed by Doctors W. H. Johnson, J. F. Townsend and Jenkins, Dr. Taft closing.

There being no further business, the meeting adjourned.

W. A. Smith,
Secretary.

INTERNAL MEDICINE

J. H. Cannon, M. D., F. A. C. P., Charleston, S. C.

PRIMARY HYPOCHROMIC ANAEMIA

(Erythro-normoblastic anaemia)

A new type of idiopathic anaemia.

By Wm. Dameshek, M.D., *American Journal Medical Sciences*, October, 1931

Interest in the anaemias has received tremendous impetus following the experimental work of Whipple and his associates, and the application of some of their findings—particularly the use of liver in the Addisonian type by Murphy and Minot, and the further demonstration by Castle that the anti-anaemic factor, whatever it may be, resides in the normal stomach. These and other facts have served to clear much of the mist surrounding the latter type of anaemia, and has placed in the hands of the profession an agent to combat this disease comparable to insulin in diabetes and salvarsan in syphilis.

The author describes what he considers to be a primary type of secondary anaemia which he believes constitutes an entity. His observation is very interesting in that it is quite likely fairly common, and that there are certain features resembling the Addisonian type, but, unlike the latter does not respond to liver and does give a prompt response to large doses of iron.

The prevalence of secondary anaemia makes this and the succeeding abstract of considerable interest to those of us having to treat such cases.

He reports nine (9) cases coming under his observation which he believes fulfills his requirements for this condition, which are:

1. A secondary type of anaemia for which no cause could be found. The blood picture showed low color index, hypochromia, low average red blood cell diameter, leukopenia, relative lymphocytosis and thrombocytopenia.

2. Objectively pallor without icterus, atrophied tongue, spoon nails and at times symptoms of combined system disease. Achlorhydria or hypochlorhydria was present.

3. History of remissions and relapses of anaemia, sore tongue, gastro-intestinal symptoms and paresthesias.

4. The anaemia and all symptoms responded promptly to large doses of inorganic iron, but there was tendency to relapse when the iron was discontinued.

He points to the resemblance of this type of anaemia to the Addisonian type in many of its features, and thinks it may be an unusual type of the latter condition.

IDIOPATHIC HYPOCHROMEMIA

By Edward S. Mills, M.D., M. Sc., *American Journal Medical Sciences*, October, 1931

The author reports twenty-three (23) cases of secondary type of anaemia with a low or absent free acid content of gastric juice, the majority responding to iron and copper therapy. He likewise believes it a distinct entity. He quotes Sapponen's analysis of 209 cases of hypochromic anaemia and found that 10 per cent were of the idiopathic type.

His cases were all women, the majority between ages of 30 to 40, the youngest a girl of 26, the oldest a woman of 61 years. Overwork, poor hygienic conditions and improper food seemed to play a minor role, and pregnancy a complication responsible for exacerbation of the anaemia rather than a cause. Heredity played a small role in that only one case gave a family history of anaemia and one woman brought her daughter aged 14, who was found chlorotic.

All cases showed either a marked diminution or absence of free acid in gastric contents.

He quotes Faber's and Gram's study on a series of 90 cases of achylia which showed 41 per cent to be anaemic, the majority being of the secondary type. They concluded that it is proved that achlorhydria or hypochlorhydria predisposes to anaemia of the idiopathic type, though this defect is not the cause.

The symptoms were those of any severe form of anaemia. Onset invariably insidious, history of menstrual disorders was frequent, several admitted flatulency but were not as a rule undernourished.

Physically, they were of a waxy bloodless appearance with pearly sclerae. In 5 of the 23 cases the skin was of a subicteroid appearance and the adipose tissue was well preserved suggesting pernicious anaemia. Subacute combined sclerosis of the cord was not found in any case, though numbness and tingling was a common symptom. Glossitis was not observed though some degree of atrophy was not uncommon.

The blood showed low hemoglobin, color index .5 or .6, red blood cells around 4 million, platelets slightly reduced, leukocytes usually reduced and a relative lymphocytosis. There was no evidence of haemolysis and the red blood cells averaged slightly below normal diameter. Immature forms were not seen.

The treatment given was Bland's Mass grs. XXX, copper carbonate gr. 1-48 in a soluble capsule together with a suitable laxative. This was given thrice daily. No hydrochloric acid was given unless the case proved refractory to the iron copper mixture. Twenty-one of the twenty-three cases have been successful on the above treatment.

**PROCEEDINGS OF THE ANNUAL MEETING
OF THE MEDICAL SOCIETY OF SOUTH
CAROLINA, WHICH WAS HELD AT FORT
SUMTER HOTEL, TUESDAY EVENING, DE-
CEMBER 8th, 1931, at 8:30 O'CLOCK**

The meeting was called to order by the President, Dr. J. Sumter Rhame.

Present: Doctors: A. E. Baker; A. E. Baker, Jr.; B. R. Baker; Ball; Banov; Barnwell; Beach; Beckman; Boette; Bowen; Bowers; Burn; Byrnes; Cain; Cannon; Chamberlain; Deas; de Saussure; Finger; W. H. Frampton; Gantt; Heidt; Hope; Jackson; F. B. Johnson; W. H. Johnson; LaRoche; Lynch; McCrady; McInnes; Maguire; Martin; Mazyck; Mitchell; Mood; O'Driscoll; F. L. Parker; Pearlstine; Pettus; Phillips; Prentiss; F. R. Price; Prioleau; Ravenel; Rhame; W. M. Rhett; W. P. Rhett; Richards; Rutledge; Sams; Sanders; W. A. Smith; C. A. Speissegger; W. H. Speissegger; Sughrue; Taft; J. F. Townsend; Waring; Whaley; I. R. Wilson; I. R. Wilson, Jr.; L. A. Wilson; Robert Wilson; Zerbst; Jenkins; Rudisill; Peebles; Culbreath. (68).

Guests: Mr. T. R. Waring, of the Charleston Evening Post; Dr. Charles A. Mobley, President of the South Carolina Medical Association; Dr. E. A. Hines, Secretary of the South Carolina Medical Association; Dr. W. A. Black, of Beaufort; representatives of the Roper Hospital interne staff.

The minutes of the meeting of November 24th were read and confirmed.

The Secretary read a letter from Dr. Jenkins M. Pope in which he enclosed a check to cover his dues for the year and requested that his resignation be accepted, pointing out that, most of his work being confined to agricultural pursuits, he felt it wiser not to retain his membership in the Society. It was moved, seconded and carried

that the resignation of Dr. Pope be accepted with regret.

The President then stated that this was his final meeting as presiding officer of this Society, and he made the following remarks:

Gentlemen:

As retiring President of this distinguished body, I wish to convey to you my feelings of appreciation for your loyalty and support during the past two years. Our coordinated efforts have been fruitful as evidenced by the increased membership and the interest of the members, bringing the Society up to a high standard of efficiency.

During my term of office it has been gratifying to me to see the completion of a White Contagious Hospital, made possible through the generosity of the City and the heirs of the late Mr. Andrew B. Murray, one of Charleston's greatest benefactors; also the addition of the Library and Laboratories of the Medical College of the State of South Carolina, both of which have contributed in no small measure to the advancement of medical science in our community.

The Society has been honored by visits from distinguished physicians and surgeons of other states, and the Surgeon General of the United States Navy. The exchanging of ideas with these men must result in a coordination of purpose, which is of mutual benefit.

With my retirement as President, the Medical Society of South Carolina is rounding out 142 years of continuous service to the people of Charleston, having been established in 1789, with Dr. Peter Fayssoux as first President.

We have endeavored to hold high the standards and glorious heritage established by our predecessors.

If my years of service have brought me nothing by the friendship of this fine body of men, I feel amply repaid for the time invested.

(Continued on Page 320)

SOUTH CAROLINIANA

J. I. Waring, M.D., Charleston, S. C.

Primary Tuberculosis of the Spleen, with Report of a Case Simulating Banti's Disease—George Bunch, Columbia. *Sou. Med. Jour.* 24, Sept. 1931, p. 764.

This case was primary in the sense that no other primary focus was found by the usual physical and x-ray examinations. Splenectomy was the successful treatment used for the condition and for the hematemesis, the chief symptom. Illustrated.

An Unusual Case of Traumatic Pneumocephalus, R. B. Taft, Charleston, *Amer. Jour. of Roentgenology.* 25, June 1931, p. 800. A case is described in which there were several fractures of the frontal bone extending into the frontal sinus. Apparent cure followed conservative treatment but three months later the patient returned with profuse watery discharge from the nose and intense headache. Radiographs showed a large bubble of air occupying practically all of the right frontal area. Death occurred during convulsion. Autopsy showed a large hole thru the cribiform plate thru which air entered a corresponding hole on the brain substance. All of the ventricles were filled with greenish pus.

A Cervical Dilator—L. H. McCalla, Greenville. *Am. Jour. of Obs. & Gyn.* 22, Sept. 1931, p. 428.

Photograph and brief description of a cervical and uterine dilator, made from the handle of a long curette, having removable olivary tips of different size, and a protective flange.

Etiology of Acrodynia: Report of Three Cases—William Weston, Jr., Columbia—*Southern Medical Journal*, 24, May, 1931, p. 378.

Dr. Weston touches on the theories of the cause of acrodynia—viz., diet deficiency and focal infection, and reports three cases showing the symptoms grouped under the "Seven P's"—

pain, pink hands and feet, peeling, prostration, paresthesia, perspiration, photophobia. He concludes that acrodynia is a deficiency disease with a superimposed infection.

Antepartum Hemorrhage—L. A. Wilson, Charleston—*Sou. Med. & Surg.* 93, Sept. 1931, p. 653.

From review of his cases the author concludes that conservative waiting for spontaneous delivery is the best treatment for premature separation unless bleeding is uncontrollable. Placenta previa, ectopic gestation, rupture of the uterus and hydatidiform mole are considered in their relation to the subject. Material for discussion is furnished by 3348 deliveries in the Roper Hospital and in the author's practice.

Factors in the Prevention and Treatment of Postoperative Intestinal Obstruction—A. E. Baker, Jr., Charleston. *Sou. Med. and Surg.* 93, May, 1931, p. 341.

This paper includes illustrative cases of the several degrees of severity of postoperative symptoms of obstruction, and the prophylactic and curative treatment.

Address of the President of the Tri-State Medical Association, W. B. Lyles, Spartanburg. *Sou. Med. & Surg.* 93, Mar. 1931, p. 157.

Communism, the dictates of an invisible power, social workers, veteran's bureau hospitals, and the apathy of the profession in the face of these unsolved problems are the several chief subjects of this address.

Vitamin Chart—Dr. Wm. Weston, with the assistance of Dr. Harold Levine, has revised (June, 1931) and published a handy and authoritative chart indicating the functions, results of absence, and sources of the six rec-

ognized vitamins. This chart can be obtained from the S. C. Food Research Commission.

Basal Metabolic Rates of Medical Students and Nurses in Training at Charleston, S. C.—Roe E. Remington and F. B. Culp, Charleston. Arch. Int. Med. 47, March, 1931, p. 366.

Determinations of basal metabolism on ninety-three student nurses and forty male medical students at Charleston, S. C., showed results averaging about 10 per cent lower than the AubDu Bois standard. The results were compared with those of similar work done at Tallahassee, Fla., and Minneapolis. Climate, the relative amount of iodine in human environment, dietary habits, and the state of nutrition are not considered responsible for the low values obtained.

Massive Atelectasis Following Tonsillectomy—J. W. Jervey, Jr., Greenville—Sou. Med. J. 24, Nov. 1931, p. 975.

Case report of a rare condition ascribed to the aspiration of blood from the operative field and relieved by postural drainage and induced cough.

Iodine in Nutrition—William Weston, Columbia—Am. J. Pub. Health 21, July 1931, p. 715.

Dr. Weston reviews the history of the relation between iodine, thyroid function, and the development of goiter. He discusses the requirement and function of iodine in nutrition, and speaks of the favorable results secured by supplying iodine through the feeding of concentrated South Carolina spinach and lettuce.

Two cases of Primary Liver-Cell Carcinoma—Robert Wilson, Charleston—Internat. Clinics 3, Sept., 1931, p. 157.

In each of these cases there was an old portal cirrhosis with a primary liver-cell carcinoma arising apparently from the hyperplastic cells of the lobules which had enlarged under the cirrhosis. There was extension through the portal venous system. Initial symptoms were obscure and the course rapid. The pulmonary metastases gave no clinical symptoms or signs.

Encephalitis—M. W. Beach, Charleston—Arch. of Ped. 47 Oct. 1930, p. 651.

A resume of the pathology and symptoms of this disease, and a brief survey of a series of 32 cases seen in Roper Hospital.

17. The Value of the Oyster in Nutritional Anemia. Harold Levine, Roe E. Remington, and F. Bartow Culp, Charleston. Jour. of Nutr. 4, 1931, p. 469.

Comparison of the effects of oysters, oyster ash, and a synthetic Fe-Cu-Mn solution on blood regeneration in anemic rats. Oysters have been found extremely potent in curing anemia due to a milk diet, their value lying in the mineral elements contained.

A Portable Reaction of Degeneration Apparatus—J. Van de Erve and J. M. Van de Erve, Charleston—Jour. of Nerv. & Ment. Dis. 74, July 1931, p. 34.

A portable, simple apparatus for obtaining the reaction of degeneration is described. It is constructed of parts obtainable from radio supply houses.

Calcium Carbonate Gall-Stones—(Phemister, D. B., Rewbridge, A. G., Chicago) and Rudi-sill, H., Jr., Charleston—Ann. of Surg. Oct. 1931, p. 493-517.

Chemically pure calcium carbonate stones are rare. This paper reports seven additional cases and concludes that obstruction to the cystic duct, either intermittent or continuous, appears to be necessary for the precipitation of large amounts of calcium carbonate in the gall bladder and that the salt comes from the gall bladder wall. Furthermore, obstruction of the cystic duct may also lead to degeneration, fibrosis, and calcification of the gall bladder wall, with or without stone formation. These two pathological processes are not the same. Calcium carbonate in the lumen of the gall bladder is in the realm of stone formation, while calcium deposits in the gall bladder wall belongs to the class of tissue calcifications.

The Development of the Ear and its Relation to Otitis Media and Mastoiditis—John F. Townsend, Charleston—Sou. Med. Jour. 24, May, 1931, p. 402.

In an article illustrated with diagrammatic plates, the author discusses the development of

the ear and shows that one cause of the relative frequency of otitis media in infancy is the larger, shorter, more horizontal Eustachian

tube and the numerous folds of the mucosa of the ear. He also describes the types of mastoid and the result of infections therein.

WOMAN'S AUXILIARY South Carolina Medical Association

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District 6. Mrs. Mobley	Florence, S. C.
District 7.	
District 8. Mrs. Charles Mobley	Orangeburg S. C.

Feeling that an explanation is due the Auxiliary concerning our Publicity Chairman and Corresponding Secretary also Public Relations Chairman you President wishes to state that the duly elected Publicity Chairman, Mrs. M. L. Parler, found it impossible to serve and at the Executive Board meeting in October, Mrs. L. H. McCalla, Greenville, S. C., was elected to serve out the term. Mrs. C. P. Corn of Greenville has been appointed Corresponding Secretary, the office made vacant when Mrs. McCalla was elected Publicity Chairman. Mrs. William Weston, Columbia, S. C., is now the Public Relations Chairman, elected by the Executive Board.

Won't you cooperate in every way with these Chairmen and help make this the best year in every respect? Send your news items to the Publicity Chairman for the Journal. She is expecting you to do this. May we depend upon you?

Faithfully yours,

Mrs. L. O. Mauldin, Pres.

The Executive Board of the Auxiliary to the South Carolina Medical Association held its annual meeting, Tuesday, October 11, at 11 A. M.

in the Jefferson Hotel, Columbia, S. C. with eight members present—Mrs. L. O. Mauldin, President; Mrs. W. C. Abel, President Elect; Mrs. W. T. Martin, First Vice President; Mrs. Robt. Durham, Recording Secretary; Mrs. L. H. McCalla, Corresponding Secretary; Mrs. J. H. Cutchins, Hygeia Chairman; Mrs. W. A. Boyd, Student Loan Fund Chairman; Mrs. P. V. Mikell, Councillor, District No. 2; Mrs. William Weston, South Carolina Editor for A. M. A. Journal, visitor.

The object of the Executive Board meetings is to get inspiration and give inspiration by our special reports. Each officer, committee chairman and each councillor made interesting reports about their work. Important business was transacted and plans made for the year's work.

Items sent to us by our National Press and Publicity Chairman, Mrs. L. H. McCalla, of Greenville, are as follows:

Our National President, Mrs. A. B. McGlothlan, attended the Annual meeting of the Auxiliary to the Kentucky State Medical Society, Lexington, Ky., Sept. 7-10. Here are a few of the interesting features she reports.

Kentucky has a standard of excellence for her component Medical Auxiliaries. Points of excellence as the study of State Medical and Health Laws, the use of National Auxiliary Study Programs, review in each Auxiliary of Gossett's "What the Public Should Know About Child Birth."

In Kentucky, each month, from four broadcasting stations a ten minute health talk is given (It is worth knowing that the American Medical Association will supply five minute radio talks on seventy-two different health topics, and fifteen minute talks on sixty-two different health topics). Various physicians of the State are selected to give these talks.

The Kentucky Auxiliary promoted a contest carried on in ten counties in which a prize was given to the school boy or girl writing the best essay on the value of a County Health Unit.

If your Auxiliary is not informed of the nature and value of the County Health Unit, devote a meeting to the use of the Study Program on that subject supplied by the National Auxiliary.

Colorado is one state in which district services

in medical legislation has been rendered by the Woman's Auxiliary to the State Medical Association.

In California the Program Chairman, Mrs. F. E. Culteo, suggested two estimable eight months programs for County Auxiliaries. Since they are not copyrighted we are paying Mrs. Culteo the compliment of passing them on.

Here they are:

Sept. "Why An Auxiliary." Speaker if possible State Officer, preferably the President.

Oct. "Working Principles of Our County Health Unit." The County Health Officer.

Nov. "Common Defects in Children" or "Contagion And Immunization." Member using National Auxiliary Material.

Dec. "Teeth and Their Relation to Health." School Dentist.

Jan. "What are We Doing for the Physically Underprivileged Child." Selected Speaker.

Feb. "Mental Hygiene." Local Psychiatrist or Selected Speaker.

March (a) Book Review. "The Human Mind." Memminger.

March (b) "What Our Country is Doing for the Mentally Ill"—Selected Speaker.

April (a) Book Review—"Biography of Virgin Mind"—Dakin, Auxiliary Member.

April (b) "Our State Health Laws."—Selected Speaker.

The programs of all meetings should include as a "roll call" medical current events, new discoveries, accomplishments and happenings.

A Plea for Hygeia

The House of Delegates of the American Medical Association has again asked the Woman's Auxiliary to assist them in their program of education of the lay public carried on through the Health Magazine, Hygeia, concerning the work of the medical profession in the prevention and care of diseases. Does it not seem to you that we should make a valiant effort to give them the assistance they ask.

By encouraging the reading of Hygeia, the only authentic health periodical available in this country, it is our aim to inform the lay public, particularly teachers of the young and pupils in school, of the progress of medical science and of scientific means for the prevention of diseases—and in this way help stamp out irregular medical practice.

"If Women's Auxiliaries," says Dr. E. S. Judd, President of American Medical Associations, "will assume the responsibility of helping the members of their clubs and also the parent teachers associations to keep informed regarding the proper medical practices they could perform a great service to their communities."

How can we stimulate the reading of Hygeia?

There are numbers of ways. See that a subscription of Hygeia goes to your school, college and public library. Have Club Members make Hygeia talks before their clubs, conduct exhibits whenever feasible. A contest among school pupils, prizes awarded for best essays on "How Hygeia Helps point out the Way to Good Health." A wealth of material giving programs and suggestions may be obtained from your State or National Hygeia Chairman. In fact a calendar of work for Hygeia for this year has been outlined and your National Auxiliary is asking that every county chairman carry out this program as near as possible.

If we really have the respect for the work of the medical profession that we profess to have and if we wish to promote their interests with the public and at the same time benefit the public as well as the profession, let us concentrate our energies on making this the greatest year ever for Hygeia.

Activities of Woman's Auxiliary to S. C. Medical Association

Laurens County

Laurens County though newly organized and with only nine members are sharing a great deal of enthusiasm in carrying on their work and we are expecting to hear some interesting reports from them in the near future. They are already busy raising money for the Student Loan Fund. This is a good example for other Auxiliaries to follow because it won't be long before the call for money will be coming and it would be fine to have some on hand when it does.

Greenville County

On November 11, the Greenville Auxiliary held its second Reciprocity Meeting at the home of Mrs. W. C. Hearin, with about seventy-five present. Invitations were issued to the President and one representative from each Woman's Club in the City, as well as all doctor's wives and daughters in the county. An interesting program had been prepared, carrying out the Health Program as recommended by the Auxiliary to the American Medical Association. Two subjects were chosen that was thought would be of interest to the public at large,—namely, "High Blood Pressure" and "Correct Posture." These subjects were discussed in a most instructive way by two local physicians, Dr. W. S. Fewell and Dr. J. W. White and received most enthusiastically by all present, as manifest by the questions and discussions following. The meeting was concluded by a social hour at which time hot punch and cake were served by members of the Auxiliary.

"Reciprocity Day" in Greenville has proven such a success that the Auxiliary decided to observe this day each year.

Auxiliary to Southern Medical Association

Members attending meeting of Auxiliary to Southern Medical Association at New Orleans report a splendid meeting and a good time. A full report of this meeting will appear in your next Journal.

The Woman's Auxiliary Department, Missouri State Medical Journal, September, 1931, contains the following paragraph:

Mrs. A. B. McGlothlan, St. Joseph, was installed as president of the Woman's Auxiliary to the American Medical Association at the meeting in Philadelphia, June 8, 9 and 10. Mrs. McGlothlan has had much and varied experience in organization work. She was the first state secretary of the Missouri Auxiliary and its third president. She has served as state and as national

chairman of Hygeia. Through her efforts the state won the hundred dollar prize offered the state auxiliary obtaining the largest number of subscriptions to Hygeia. She is a member of the Missouri Child Health Council and initiated and directed the effort which secured a County Health Unit in her county. She was a member of the White House Conference on Child Health and Protection. Mrs. McGlothlan is interested in civic as well as medical organizations, having served as treasurer and more recently for several years as president of the St. Joseph Y. W. C. A. and is a member of the National Y. W. C. A. board. She has taken an active part in Community Chest work and in cultural club and church activities. The Missouri Auxiliary is confident of a successful year for the national auxiliary under the leadership of Mrs. McGlothlan.

HUMANITY IN THE HOSPITAL

The address by Dr. Joseph Brennemann on "The Human Side of the Hospital," printed elsewhere in this issue of The Journal, merits more than cursory consideration. Many a medical leader has emphasized the fact that increasing science in the practice of medicine has tended to interfere considerably with its appreciation of the human equation. Indeed, the chief reason for opposition to the mechanization of medical practice has been the realization by physicians that overstandardization interferes with the care of the patient as an individual human being and tends to consider him as a composite of degenerated organs and disordered systems.

Many a hospital board has been disturbed by the apparent loss of good will on the part of the community that it serves without realizing that its employees at the door have apparently never heard of the idea of service. Many a patient and many a relative of patients have been antagonized by an insolent attendant at the desk or a discourteous employee at the telephone. The hospital that employs an uneducated clerk or the disabled parasite of some member of the board to meet its incoming guests makes an error of technique that is certain to be reflected on the balance sheet.

Rigid routine takes little account of variations in human temperament or personal disabilities. The hospital that is governed by unvarying routine is, therefore, not a hospitable hospital. It is taking care of robots and not of human beings. The routine that demands the awakening of all patients at 5:45 in the morning, regardless of their need for rest, is a perfect example of the dangers inherent in the militaristic system. Dr. Brennemann's citation of this particular point will be sympathetically reechoed by every person who has suffered under its enforcement.

The present period is one of education. Leaders have realized that much more can be accomplished through education and by taking the patient into confidence than can possibly be achieved by dictatorial methods. The scientific atmosphere is strange to the uninformed mind. In a recent conference on hospital service, the superintendent of a Pennsylvania institution displayed a group of pamphlets circulated by his hospital to the community, explaining to the uninformed the reasons for extra charges for the use of the operating room, for laboratory service and for similar extras on the patient's bill. Reasoning human beings seldom protest when they are informed. The solution to the hospital's problem would seem to be the development of some form of publicity that would enable the average man to know the why and wherefore of modern medical and hospital methods. Large institutions and large corporations employ specially trained individuals for this purpose. Hospitals might be able to find among their employees some one who could undertake a similar service, particularly for them.—*Jour. A. M. A.*, Nov. 14, 1931.

MANAGEMENT OF SKULL FRACTURES AND INTRACRANIAL INJURIES

Harry E. Mock, Chicago (*Journal A. M. A.*, Nov. 14, 1931), calls attention to the fact that the annually increasing morbidity and mortality rate due to trauma, with skull fracture causing a high percentage of the deaths, makes this one of the great economic and medical problems of the present time. It is impossible to standardize treatment, as each individual case presents its own peculiar requirements. But it is possible to give a rational routine treatment which can be applied to 50 per cent of all skull fracture cases and then to classify the remaining cases into the

Following three groups: (1) Those in which rest treatment alone is sufficient (4 per cent); (2) those who must have, in addition to routine care, the special treatment of lumbar drainage (33 per cent), and (3) those cases having definite, recognized indications for cerebrocranial operations (13 per cent). The author attempts to clear up certain controversies by detailing those practices recognized by the majority of authors on this subject and proved of the greatest value in his hands, in the management of skull fractures and cerebrocranial injuries. His article was written for those men away from medical centers who are just as frequently confronted with these cases and who are sometimes led astray in their treatment by certain teachers decrying lumbar drainage and by other teachers extremely adept in operative technic, advocating operative intervention in skull fractures, especially decompressions. He believes that if the average man will delay all roentgen examinations, undue physical examinations and operative procedures (with a rare exception) until the initial shock is over and then will classify his cases according to their signs and symptoms, he will develop for himself a common sense, rational line of treatment free from many of the controversial pitfalls commonly found in the management of skull fractures. Skull fractures should be treated at or near where they occur. Specialists, if desired, should be taken to the patient with the skull fracture rather than the patient to the specialist. Since, in the majority of communities, specialists in this condition do not exist and since the automobile has become a potential carrier of skull fractures to every hamlet, village and city in the land, it behooves all with experience in this matter to simplify and clarify the management of skull fractures to the end that the majority of physicians can properly cope with this grave emergency when and wherever confronted with it.

The American Board for Ophthalmic Examinations will hold an examination in New Orleans on Monday, May 9th, 1932, at the time of the meeting of the American Medical Association. Necessary applications for this examination can be procured from the Secretary, Dr. William H. Wilder, 122 South Michigan Avenue, and should be sent to him at least sixty days before the date of the examination.

The Sixteenth Annual Clinical Session of the American College of Physicians will be held in San Francisco, California, April 4-8, 1932. The headquarters in San Francisco will be the Palace Hotel, where the general scientific sessions, registration, and exhibits will be held. Clinics will be conducted in various hospitals and institutions in San Francisco and near-by communities.

Dr. S. Marx White, Minneapolis, President of

the College, has in charge the selection of speakers and subjects on the general program, while Dr. William J. Kerr, San Francisco, Professor of Medicine at the University of California Medical School, is the General Chairman of the Session, and is responsible for all local arrangements, in addition to the arrangement of programs and demonstrations. Following the San Francisco Session a post-convention tour will be conducted through Yosemite Valley, Southern California, (with two days in Los Angeles) and the Grand Canyon of Arizona.

The attention of the secretaries of various societies is called to the above dates, in the hope that their societies will select non-conflicting dates for their 1932 meetings.

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SOCIETY REPORT FOR CHARLESTON SOCIETY, DECEMBER 8, 1931

(Continued from Page 313)

My responsibility ceases with this meeting. It has been a pleasure and a privilege to serve as your President. I pledged to you my best and I have fulfilled that pledge to the best of my ability. In surrendering this work to the one upon whom you placed the honor and duty of this exalted office I pray that he may, as I am sure he will, receive the hearty cooperation which has been accorded me.

The Election of Officers was then taken up. The President asked for nominations for President. Dr. D. L. Maguire was the only candidate, having been nominated at the previous meeting. Dr. Maguire was unanimously elected president. Dr. F. B. Johnson requested that his name be withdrawn for the office of Vice President, as he had on a previous occasion served as Vice President of the Society. Upon this request, Dr. Johnson's name was withdrawn, and Dr. O. B. Chamberlain and Dr. F. G. Cain were balloted upon for Vice President. Dr. Chamberlain was elected. It was moved, seconded and carried that for all officers and committees where there was only one candidate, the President be empowered to cast the unanimous ballot of the Society for election. The following were elected:

Secretary, Dr. W. A. Smith.

Treasurer, Dr. J. H. Cannon.

Librarian, Dr. W. C. O'Driscoll.

Commissioner of Roper Hospital, Dr. A. J. Buist.

Member of Board of Censors, Dr. W. M. Rhett.

Member of the Board of Finance, Dr. R. S. Cathcart.

Delegate to the State Medical Association, Dr. J. J. Ravenel.

Alternates to the State Medical Association, Dr. J. W. Burn, Dr. J. E. Smith, Dr. W. H. Prieau, Dr. R. L. McCrady and Dr. T. H. Martin.

Dr. J. A. Ball, Dr. W. C. O'Driscoll and Dr. J. F. Townsend were elected Honorary Fellows, having been members of the Society for twenty-five years.

At the conclusion of the election, the President appointed a committee to bring the newly elected President to the chair. He then turned the gavel over to Dr. Maguire. Dr. Maguire expressed his pleasure at the honor of being elected by the Society and stated that he would make his address at the close of his term of office. He thanked the Society very deeply for the honor bestowed upon him.

The Secretary brought to the attention of the Society the fact that one of the members was absent on account of serious illness. It was moved, seconded and carried that the Secretary write a letter to Dr. Josiah E. Smith, expressing the sym-

pathy of the Society and wishing him a speedy recovery. It was further moved, seconded and carried that a committee be appointed by the Chair to express in person the sentiments of the Society in regard to Dr. Smith's illness, and also to convey to him a bottle of the delightful punch which had been presented to the Society by the ex-presidents.

The President declared a recess, in order that the members might partake of the buffet supper which had been prepared by the Program Committee.

Immediately after the supper the meeting was called to order by the President, Dr. Maguire, who turned the gavel over to Dr. Rhame, retiring president, to act as toastmaster. Dr. Rhame introduced Dr. Charles R. Mobley of Orangeburg, the President of the South Carolina Medical Association, who gave a short talk, expressing his pleasure and gratification at having been invited to the meeting. He then introduced Dr. Edgar A. Hines, the Secretary, who also expressed his pleasure at coming to the meeting and pointed out the plans for the Association for the annual meeting in April, and directed attention to the proposed European trip, which was now being contemplated.

The toastmaster then called upon Dr. Robert Wilson to introduce the guest speaker, Mr. Thomas R. Waring, editor of the Charleston Evening Post. Mr. Waring gave a delightful and amusing talk on "The Relations of the Press to the Medical Profession."

There being no further business, the meeting adjourned.

Dr. W. A. Smith,
Secretary.

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